School of Pharmacy
University of Mich.

THE DRUG AND COSMETIC INDUSTRY

ESTABLISHED 1914

Formerly Called "DRUG MARKETS"

November, 1932

Editorials 407

We Will Help—Chain Tactics—One Way of Doing It—Popular Laxatives—Active Cosmetics—Something New.

Feature Articles

A Packaging Contrast 410
Mechanical Laxatives 413
Dangers in Cosmetics 415
What's New in Medicines 419
Manufacturers and Retailers Must Agree 423
Green for Protection 425
Make-up Preparations 427
Distribution's Part in the Depression 431
Management Forum 436
Compounder's Corner 438

New and Non-Official 409
News 441
Patents 476
Abstracts 478
Raw Material Prices 481
Drug Market Place 486
Buyer's Guide 396
Index of Advertisers 488

Copyright 1932 by Drug Markets, Inc.

VOL. XXXI DRUG MARKETS, INC. NUMBER 5
PUBLISHERS

Publication Office, 28 Renne Ave., Pittsfield, Mass. Editorial and General Office, 101 W. 31st St., N.Y. City

Editor
THOMAS R. FARRELL

Business Manager
FRAZER V. SINCLAIR

PUBLISHED MONTHLY AT PITTSFIELD, MASS., SUBSCRIPTION PRICE, TWO DOLLARS A YEAR, IN ADVANCE, FOREIGN COUNTRIES THREE DOLLARS, THREE WEEKS' NOTICE IS REQUIRED TO CHANGE SUBSCRIBER'S ADDRESSES, AND WHEN NOTIFYING KINDLY GIVE BOTH OLD AND NEW ADDRESSES; PRINTED BY THE SUN PRINTING COMPANY, PITTSFIELD, MASS. ENTERED AS SECOND CLASS MATTER, JANUARY 1, 1928 AT THE POST OFFICE AT PITTSFIELD, MASS., UNDER THE ACT OF MARCH 3, 1879.

School of Pharmacy
University of Mich.

THE DRUG AND COSMETIC INDUSTRY

ESTABLISHED 1914

Formerly Called "DRUG MARKETS"

November, 1932

Editorials 407

We Will Help—Chain Tactics—One Way of Doing It—Popular Laxatives—Active Cosmetics—Something New.

Feature Articles

A Packaging Contrast 410
Mechanical Laxatives 413
Dangers in Cosmetics 415
What's New in Medicines 419
Manufacturers and Retailers Must Agree 423
Green for Protection 425
Make-up Preparations 427
Distribution's Part in the Depression 431
Management Forum 436
Compounder's Corner 438

New and Non-Official 409
News 441
Patents 476
Abstracts 478
Raw Material Prices 481
Drug Market Place 486
Buyer's Guide 396
Index of Advertisers 488

Copyright 1932 by Drug Markets, Inc.

VOL. XXXI DRUG MARKETS, INC. NUMBER 5
PUBLISHERS

Publication Office, 28 Renne Ave., Pittsfield, Mass. Editorial and General Office, 101 W. 31st St., N.Y. City

Editor
THOMAS R. FARRELL

Business Manager
FRAZER V. SINCLAIR

PUBLISHED MONTHLY AT PITTSFIELD, MASS., SUBSCRIPTION PRICE, TWO DOLLARS A YEAR, IN ADVANCE, FOREIGN COUNTRIES THREE DOLLARS, THREE WEEKS' NOTICE IS REQUIRED TO CHANGE SUBSCRIBER'S ADDRESSES, AND WHEN NOTIFYING KINDLY GIVE BOTH OLD AND NEW ADDRESSES; PRINTED BY THE SUN PRINTING COMPANY, PITTSFIELD, MASS. ENTERED AS SECOND CLASS MATTER, JANUARY 1, 1928 AT THE POST OFFICE AT PITTSFIELD, MASS., UNDER THE ACT OF MARCH 3, 1879.

WHAT DO YOU NEED
IN THE WAY OF A GOOD

JASMIN?

JASMONIS

A synthetic, developed by L. Givaudan & Cie. in Switzerland. It blends beautifully with the natural Jasmin. The price of Jasmonis is, of course, independent of weather and crops. For the finest perfumes.

JASMIN d'ESPAGNE

A splendid value — the sweet Jasmin note — for general cosmetic perfuming. Use it alone, or with other products for individual blends. Moderate in price.

NOVO-JASMIN

Fragrant, powerful, persistent and inexpensive, is this Jasmin. Ideal for general use in popular priced lines.

●

We would like to send you samples and our price list.

GIVAUDAN-DELAWANNA INC.

80 FIFTH AVENUE NEW YORK, N. Y.

Buyers' Guide

RAW MATERIALS

ABSORPTION BASES

Th. Goldschmidt Corp.
M. W. Parsons, Imports
Pfaltz & Bauer, Inc.

ALCOHOLS

Rossville Commercial Alcohol Corp.
U. S. Industrial Alcohol Co.

AROMATIC CHEMICALS

Dodge & Olcott Company
Fritzsche Brothers, Inc.
General Drug Co.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard, Inc.
Compagnie Parento, Inc.
Sherka Chemical Co.
Ungerer & Co.
van Ameringen-Haebler, Inc.

BEESWAX

E. A. Bromund Co.
Pfaltz & Bauer, Inc.
Theodor Leonhard Wax Co., Inc.
Will & Baumer Candle Co., Inc.

BORAX

American Potash & Chemical Corp.

COD LIVER OIL

P. R. Dreyer Inc.

COLORS

Interstate Color Co., Inc.

CRUDE DRUGS

J. L. Hopkins & Co.
S. B. Penick & Company

DENTIFRICE BASES

Iliff-Bruff Chemical Co.
Industrial Chemical Sales Co., Inc.
John & E. Sturge, Ltd.

ESSENTIAL OILS

W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Company
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard, Inc.
Compagnie Parento, Inc.
A. M. Todd Co.
Ungerer & Co.
van Ameringen-Haebler, Inc.

FLAVORING MATERIALS

W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Company
Fritzsche Brothers, Inc.
Magnus, Mabee & Reynard, Inc.
Ungerer & Co.
van Ameringen-Haebler, Inc.

GELATINES

Coignet Gelatines

GLANDULAR PRODUCTS

Wilson Laboratories

GLYCERIN

Colgate-Palmolive-Peet Co.
Will & Baumer Candle Co., Inc.

LANOLIN

American Lanolin Corp.
Th. Goldschmidt Corp.
Pfaltz & Bauer, Inc.

MEDICINAL CHEMICALS

Benzol Products Co.
California Fruit Growers Exchange
Citro Chemical Co.
Dow Chemical Co.
Heyden Chemical Corp.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Monsanto Chemical Works
N. Y. Quinine & Chemical Works, Inc.
Chas. Pfizer & Co., Inc.
Schuylkill Chemical Co.
S. Schwabacher & Co., Inc.
Sherka Chemical Co.
Swann Corporation

MINERAL OIL

M. W. Parsons Imports
S. Schwabacher & Co., Inc.

SOAPS

J. L. Hopkins & Co.
S. B. Penick & Co.
John Powell & Co., Inc.

VANILLIN

Fritzsche Bros., Inc.
Givaudan-Delawanna Inc.
Magnus, Mabee & Reynard, Inc.
Monsanto Chemical Works

CONTAINERS

BOTTLES

Owens-Illinois Glass Co.

BOXES

Cleveland Container Co.

COLLAPSIBLE TUBES

Art Tube Co.
National Collapsible Tube Co.
New England Collapsible Tube Co.

GLASSINE PAPER

Riegel Paper Corp.

VIALS

Kimble Glass Co.

CLOSURES

CORKS

Armstrong Cork & Insulation Co.

LINERS

Armstrong Cork & Insulation Co.
Bond Mfg. Corp.

METAL CAPS

Aluminum Seal Co.
Anchor Cap & Closure Corp
Crown Cork & Seal Co.
Ferd. Gutmann & Co.
Phoenix Metal Cap Co.

MOLDING COMPOUNDS

Anchor Cap & Closure Corp.
Armstrong Cork & Insulation Co.

MACHINERY & EQUIPMENT

FILLING MACHINES

Alsop Engineering Co.
Arthur Colton Co.
F. J. Stokes Machine Co.
Stokes & Smith Co.
U. S. Bottlers Machinery Co.

MIXING EQUIPMENT

Alsop Engineering Co.
Arthur Colton Co.
Mixing Equipment Co., Inc.
F. J. Stokes Machine Co.

PACKAGING

Pneumatic Scale Corp., Ltd.
Stokes & Smith Co.

PHARMACEUTICAL MACHINERY

Arthur Colton Co.
F. J. Stokes Machine Co.
U. S. Bottlers Machinery Co.

. . . and You will find Your Problem is Given Individual Thought and Attention

A Complete
ESSENTIAL OILS
Service

Realizing our responsibility to the trade, our organization will never be content merely to keep abreast of the times. Through the constant study of the needs of manufacturers and through research of the ways to improve manufacturing processes, we strive to keep facilities for offering complete service a little in advance of actual requirements.

Intimate knowledge of basic Flavoring and Perfume materials and Essential Oils, and long experience in handling these materials qualify the MM&R Sales Service Department to make valuable suggestions which may result in giving your product a better flavor or a better odor.

Ask any pertinent question. If you find it convenient to call upon us, we will be glad to discuss your problem. Also correspondence will be treated confidentially.

Of course there is no obligation in connection with this service. We know MM&R products are of incomparable quality and we try to make our service also second to none.

MAGNUS, MABEE & REYNARD, INC.

32 Cliff Street New York City

Mohawk Brand Oil Peppermint
Aromatic Chemicals
Natural Isolates
Perfume Oils
Infused Oils
Balsams

"LINKS THE MARKET WITH THE MANUFACTURER"

Basic Flavoring Materials
Terpeneless Essential Oils
Essential Oils
Paragon Olive Oil
Oleoresins

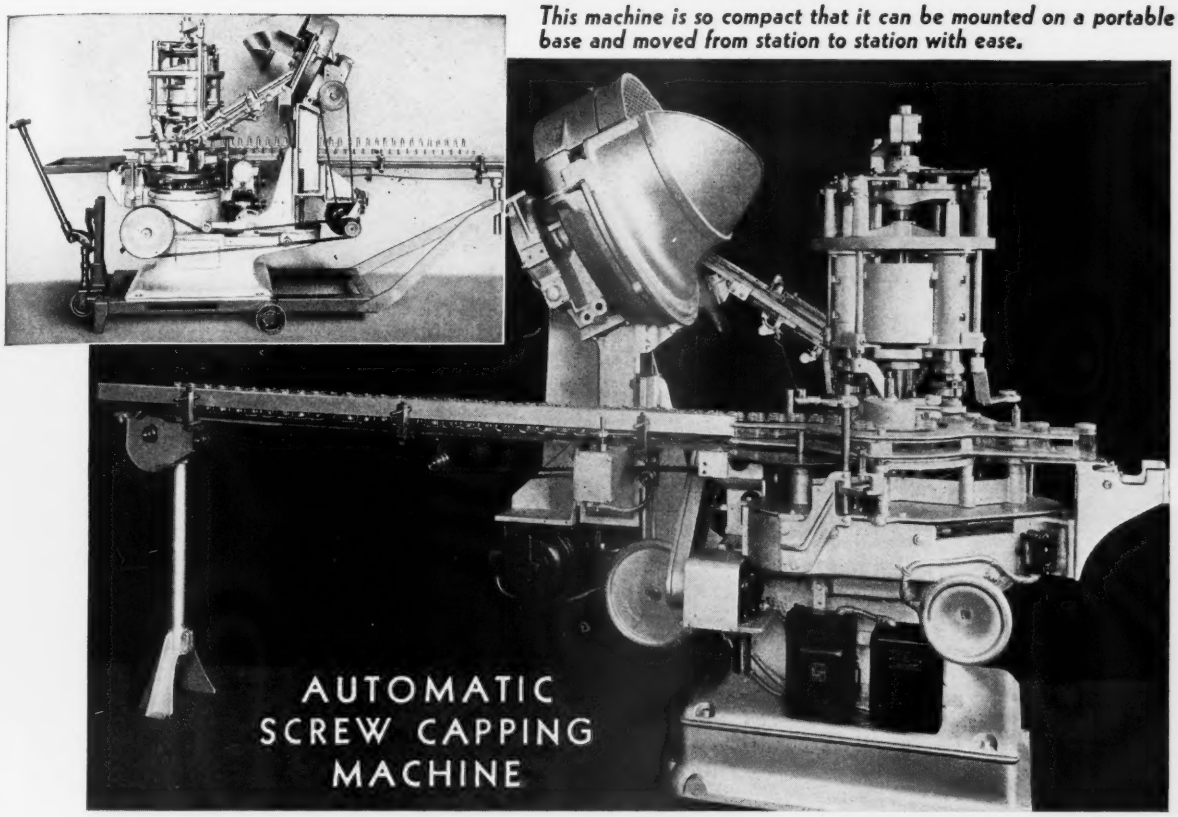
Onlzed
PHARMACEUTICAL AND PROPRIETARY WARE

HERE is a new *Onlzed* idea . . . the "Silhouette" design treatment. This new decorating method makes it possible to apply a wide variety of designs to stock or private mold containers, assuring you a modern package of distinctive individuality. The "Silhouette" is fused into the glass, becoming a permanent part of each container. We shall be very glad to cooperate with your package designers or sales executives in suggesting uses for this interesting new development.

Owens-Illinois Glass Company, Toledo, Ohio.

OWENS-ILLINOIS GLASS CONTAINERS

This machine is so compact that it can be mounted on a portable base and moved from station to station with ease.



For the FIRST TIME . . . positive sealing tension GUARANTEED!

It always used to be a matter of guess whether or not your caps were screwed on tightly enough. There was no assurance of uniform tension—no way of adjusting tension to meet different and varying needs.

In the past, capping was so involved in the difficulties of bringing the filled bottles to the capping machines without tipping, spilling or splashing that the matter of applying caps with a definite and positive sealing tension was lost in that jungle of trouble. Pneumatic takes the "guess work" and uncertainty out of capping in this latest model automatic screw capping machine. This machine is equipped with a newly developed, sensitive chuck that can be set to turn on screw-caps to any desired tension. It quickly and accurately seats *every* cap uniformly at any tension to which it is adjusted.

This is an important feature to every manufacturer of screw-cap enclosed containers. Our representatives will be glad to demonstrate it for your benefit and without obligation. Write or phone to the nearest of the following branch office addresses:—

PNEUMATIC MACHINES

Carton Feeders—Bottom Sealers—Lining Machines — Weighing Machines (Net and Gross)—Top Sealers — Wrapping Machines (Tight and Wax)—Capping Machines—Labeling Machines — Vacuum Filling Machines (for liquids or semi-liquids)—Automatic Capping Machines—Automatic Cap Feeding Machines—Tea Ball Machines

PNEUMATIC SCALE
PACKAGING MACHINERY
Standard Automatic Machine Division
PNEUMATIC SCALE CORP., LTD., 70 NEWPORT AVE.
NORFOLK DOWNS (QUINCY), MASS.
Branch Offices in New York, 117 Liberty St.; Chicago, 360 North Michigan Ave.; San Francisco, 320 Market St.; Melbourne, Victoria; Sydney, N. S. W. and Trafalgar House, No. 9 Whitehall, London, England

MR. A. T. BUSKENS
360 North Michigan Ave.,
Chicago, Illinois

MR. W. E. COUGHLIN
117 Liberty St.
New York, N. Y.

MR. L. F. BLACKWELL
70 Newport Avenue
Norfolk Downs, (Quincy), Mass.

Martha Matilda Harper, Inc.

knew where to go

TO GET *Stylish* MOLDED CLOSURES

KNOWING the ropes is half the battle in any business. When they redesigned their packages, the makers of the famous Harper Method preparations knew what they were about when they turned to Armstrong for the molded closures.

See what they got—Artmold Caps and Jar Covers that breathe of quality, beauty, and distinction. "We were deluged with letters," they say, "on the improvement in appearance of the packages."

Have you a feeling that perhaps your packages might be improved with attractive molded caps or jar covers? Then write to Armstrong for samples and prices. Choose from a complete assortment of caps in attractive stock designs.

If you wish, our Package Styling Department will work with you in designing a distinctive specially molded cap for your line—or in designing your complete package. There is no obligation for this service. Send samples of your packages and an outline of your requirements to Armstrong Cork & Insulation Co., 913 Arch Street, Lancaster, Pennsylvania.

Armstrong's Artmold Caps

Armstrong offers CORKS OF ALL KINDS . . . ARTMOLD CAPS AND JAR COVERS . . . ARTMETAL CAPS . . . EMBOSSED TOP CORKS . . . DAUBERS . . . CAP LINERS METAL SCREW CAPS . . . DU PONT CEL-O-SEAL CAPS AND BANDS . . . APPLICATORS OF ALL KINDS . . . RUBBER STOPPERS . . . CROWNS . . . BUNGS

The appeal of Glass is immediate and lasting

Glass has reached new heights in the scheme of modern packaging. More than ever, the glass vial has taken the center of the stage and indicated newer, more attractive and far more economical methods of packaging to the drug and perfume industries.

Because uniformity, sanitation and sales appeal are paramount, Kimble Automatic Machine-made Glass Vials have become the logical answer to modernizing the packing of drugs and pharmaceuticals, both new and old. Scientifically designed—fabricated entirely automatically—retempered thoroughly to eliminate strain and prevent breakage—light in weight and low in shipping cost—Kimble Vials today hold a unique and enviable position in the industry.

◆ ◆ ◆

A copy of the new Kimble Vial Booklet—complete with illustrations, specifications, prices and other valuable packaging data—will be forwarded promptly, without obligation, upon request. Write for it today.

KIMBLE GLASS COMPANY

VINELAND, NEW JERSEY.

New York, 1440 Broadway; Philadelphia, 1616 Walnut Street; Boston, 131 State St.; Chicago, 23 N. Desplaines St.; Detroit, General Motors Bldg.

CAPS OF EXCEPTIONAL BEAUTY

—An Important Factor in Package Styling

CROWN SCREW CAPS bring to the sealing of your product many important advantages that only the Deep Hook Shaped Thread provides—better sealing, better keeping qualities, easier application, easier removal. They also offer you finishes and decorations of exceptional beauty to aid you in the styling of packages for greatest sales appeal. ◆ Our staff of skilled and experienced artists are at your disposal to originate cap designs which will add to the beauty and effectiveness of your package or to carry out ideas you have in mind. And our lithographing plant is one of the largest and finest in the world. In selecting Crown Screw Caps you are assured of uniform decorations with permanence and brilliance of color that cannot be excelled. ◆ From every angle Crown Screw Caps can add to the sales power of your package. Will you stake ten minutes of your time against the value of the advantages a C. C. & S. Engineer can show you? We will send him to see you any time you say.

Positive Sealing Pressure is the title of this interesting, illustrated book which has been prepared by CCS Engineers especially for you. It explains the tremendous advantages of positive sealing pressure and how it eliminates many sealing troubles. Every packer of products in glass will find it a valuable guide in the solution of sealing problems. Do not fail to send for your copy—now.

CROWN CORK & SEAL CO. Baltimore Md.

WORLD'S LARGEST MAKERS OF CLOSURES FOR GLASS CONTAINERS

It's all in the **CAP**

STURGE'S STANDARD PRECIPITATED CHALK

Why?

U. S. P. Always

No Grit

No Free Alkali

Color Unadulterated

Free from Metals

LIGHT precipitated chalk is now generally considered essential as a filling for tooth pastes.

But laboratory control recognizes a vast difference between chalks, each of which may properly be called precipitated chalk.

Sturge's Precipitated Chalk is manufactured to a specific density—a standard which always meets the requirements of the tooth paste formula.

Sturge's Standard Precipitated Chalk always arrives in a dry, perfect condition. Strong Casks, Barrels and double Bags (calico-lined) are Sturge's Standard packages.

Stocks carried in first class, conveniently located warehouses mean prompt delivery of your requirements, large or small. These warehouses are located in New York City, Brooklyn, Hoboken, New Orleans and Chicago.

JOHN & E. STURGE, Ltd., Birmingham, England

Distributors:

H. J. BAKER & BRO.

271 Madison Ave., New York, N. Y.

FOR A GOOD TOOTH PASTE

Announcing

THE DRUG AND COSMETIC CATALOG

To be published February 1st, 1933, succeeding Drug Markets CATALOG and DIRECTORY.

The most complete and comprehensive reference book for manufacturers of pharmaceuticals, proprietaries, cosmetics, flavors and allied products.

The only directory which lists in specific detail the equipment and materials used in the manufacture of the above products.

Machinery	Fine Chemicals	Essential Oils
Equipment	Medicinal Chemicals	Flavors
Packages	Industrial Chemicals	Botanicals
Shipping Materials	Aromatic Chemicals	Raw Materials

Published by

DRUG MARKETS, Inc.

101 West 31st Street New York, N. Y.

Publishers of

THE DRUG AND COSMETIC INDUSTRY

NEW ENGLAND
COLLAPSIBLE TUBES

"TATTLING TUBES"

Far worse in effect than gossiping tongues are faulty tubes. Leaks and wrinkles whisper "here is imperfection" and with the spreading of the rumor the reputation of a product is devastated.

Our tubes will not tattle. Good value and flawless design enrich the name of your product.

NEW ENGLAND COLLAPSIBLE TUBE CO.

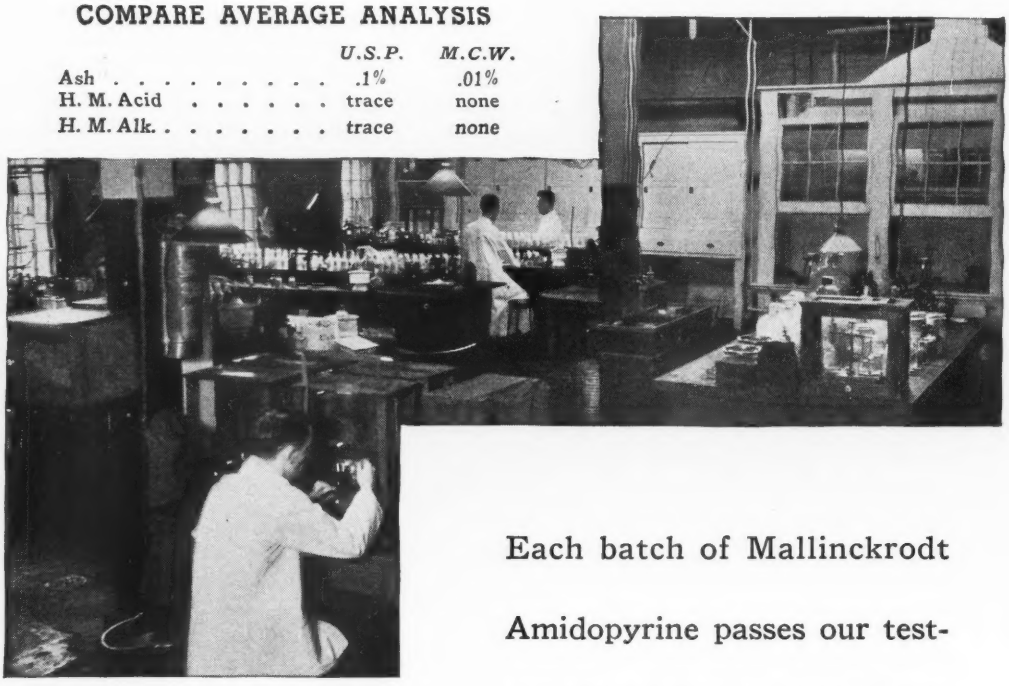
17-35 Waller St., New London, Conn.
3132-34 S. Canal St., Chicago, Ill.
370 Lexington Ave., New York

AMIDOPYRINE U.S.P.

CRYSTALS AND POWDER

COMPARE AVERAGE ANALYSIS

	U.S.P.	*M.C.W.*
Ash	.1%	.01%
H. M. Acid	trace	none
H. M. Alk.	trace	none



Each batch of Mallinckrodt Amidopyrine passes our testing laboratory as purer than U.S.P. Each batch must be up to standard before it is released for sale.

•

Packed in 100 lb. drums and smaller.

Prices and samples on request.

OTHER QUALITY
MALLINCKRODT
SEASONABLE ITEMS

ACETANILID U.S.P.
ACETPHENETIDIN U.S.P.
AMMONIUM CHLORIDE U.S.P.
ANTIPYRINE U.S.P.
CAFFEINE CITRATED U.S.P.
GUAIACOL CARBONATE U.S.P.
POTASSIUM IODIDE U.S.P.
SODIUM CITRATE U.S.P.
VIII & X
SALICYLATES

One of 1500

Mallinckrodt

fine Chemicals

FOR MEDICINAL USE

ST. LOUIS · CHICAGO · PHILADELPHIA · TORONTO · NEW YORK · MONTREAL

School of Pharmacy
University of

An Editorial

We Will Help

EDITORS are oftimes accused of being merely critics of the destructive type—they can see no good in anything that is proposed. We hope that we have not created that impression although we admit that we have sometimes been rather caustic in our remarks regarding certain proposals designed to improve some undesirable conditions.

RECENTLY we advocated that retailers seize the present opportunity to force manufacturers openly to cooperate in the passage of some sort of legislation to prevent predatory price-cutting. We admit that we had no specific plan in mind, but we are perfectly willing to go to work on one if the hetrogeneous retail trade can be made to agree within itself before an attempt is made to work out a compromise with the wholesale and manufacturing divisions of the industry.

WE STRONGLY feel that the matter of certain personalities is one of the major stumbling blocks in such a program. Submersion of individual interests for the time being would be essential to the success of the movement.

BECAUSE we are a magazine published solely in the interests of manufacturers, many wonder why we are so fair to the retail trade and even go so far as to tell the retail trade how to force concessions from the manufacturers. Frankly, the reason for this attitude is that we do not believe that a continuance of present conditions is in the interests of the manufacturers in the long run. In fact leading reputable manufacturers feel the same way, but they can not control competition and must meet it to a certain extent.

IN THEIR more sober moments, manufacturers are continually arriving at the conclusion that a stable and profitable independent retail trade is essential to the continued welfare of the manufacturer. The growth of chains is not in the manufacturers' interest. And the latest trick of wiping out high rentals by means of bankruptcies is just as great a threat to the future of the manufacturers as it is to the future of the independent retailers who are unable to avail themselves of this method or who probably would not be regarded as a good credit risk if they did.

Chain Tactics Last month the Pennsylvania Drug Company—a drug chain in New York City—took upon itself the task of comparing two brands of aspirin for their customers and prospective customers. They sent packages of Bayer's and Squibb's Aspirin to an analytical chemist. Then they made a window display of the two products with the analyses. Bayer's Aspirin they offered at 74c per hundred, and Squibb's at 39c per hundred. You might suspect that lower priced Aspirin did not suffer in the analytical comparison, and such was the case.

The window display was so potent from the point of its probable effect upon consumers, and upon the possibility of tumbling two reputable houses into a trade war, that Squibb officials were very careful to explain that they had nothing to do with it, the window was just another instance of voluntary co-operation with Squibb on the part of drug retailers.

The reasoning behind the move by Pennsylvania Drug Company is easy, and in fact is partly explained by an official of the company. An attempt is being made to have customers rely upon the statements made by the salesmen in the Pennsylvania stores, rather than upon the advertising claims of the drug manufacturers. In selecting such a reputable house as Squibb, an eastern chain has gone a long way toward getting customers to listen to its story. Probably the chain will select other items to compare as time goes on, finally convincing customers that the chain knows what it is talking about. Finally (the chain probably hopes) there will be no further need for such dynamic displays, because the public will take any brand of merchandise which the chain offers for sale.

• • •

One Way of Doing It Recently we heard of a large oil company in the West whose policy it is not to undertake the marketing of a product unless the retailer can be given a discount of fifty per cent. from the list retail selling price. This is as far as the company goes in pricing the article. The individual retailers can do as they please. However, the retail list price is competitive with other articles for the same purpose, and, therefore, if the product is cut by the retailer, the market is assured to the manufacturer. Or if the retailer does not cut the price, he will make more money on that particular item and will therefore be more anxious to sell it.

Evidently something of the same policy has been adopted by the Western Company in their marketing of Dr. West's tooth paste. We read that they are pricing their product so that the retailer can make his normal profit while selling the item at a cut price to meet the competition of other tooth pastes which are generally sold at cut prices. If he sells this tooth paste at a normal price, he will get a greater profit than on any other similar product. Of course there is always the possibility that the cut price birds will cut Dr. West's tooth paste to a point at which they are losing money on it. But then Dr. West's will get a greater share of the business until other manufacturers follow suit or other retailers refuse to handle the product unless it is adequately protected.

• • •

Popular Laxatives While many are of the opinion that psyllium seed has reached its maximum and is starting to recede, we wonder if this opinion is truly justified or whether it is due to the more favorable prices for the seed as a result of far greater offerings from abroad. Or still it might be due to the very large number of packers of the seed and the fact that really large packers are fewer because the number is so much greater.

But whether or not psyllium has reached its peak, the desire for mechanical laxatives is still very strong and we see other laxatives of this type rising slowly but surely to prominence. Mechanical laxatives for which advantages over psyllium are claimed, are now being used at an increasing rate by physicians. We all know that the recommendation of the physician plus the natural yearning for a harmless laxative will continue to make the market for products of the mechanical type an active one.

• • •

Active Cosmetics The market for cosmetics is moving swiftly and the newer raw materials are quickly being made available to the consumers in new products. Turtle oil being one of those which has caught the popular fancy with its regenerating claims, we see turtle oil creams offered at department stores at extremely low prices.

We honestly believe that the low prices at which many of these items are offered as well as the rapidity with which the smaller concerns get these new products in the hands of consumers is one of the reasons why the cosmetic branch of the industry is so interesting and so varied in its scope.

Such continual advancement not only in the scientific progress in products as well as the continual advancement in packaging and merchandising ideas also makes cosmetics a business which can not be successfully dominated by a few large concerns with slow-moving boards of directors. The ideal concern in this industry is one dominated by a single man who can say yes or no within a short space of time or is willing to give someone else just such authority.

A business made up of a large number of intensely active concerns, very much alive to the trends in their industry, makes for a healthy and virile industry.

• • •

Something New The urge to create something new is not so strong with those manufacturers who are close to the facts of retailers' credits. A company with one or two successful specialties may attempt to increase his business by the addition of one or more items. Naturally the credit granted to individual retailers remains at the same amount. This means that the retailer must scale down his stock of the basic products of the company in question in order to maintain stocks of the new items. In addition to this damper applied to the company's business on its basic products, the company does not know whether or not the new items will sell and therefore further undermines the credit of the retailers to whom it sells.

Evidently all is not roses in business today no matter how one goes at it. Experiments are evidently more costly now than they were in boom times. Still manufacturers will bring out numerous new products in the hope that one of them will click. We don't know the answer but we suppose that greater caution in selecting the product would help—but, shucks, any reputable company is supposed to use all the caution in the world.

• • •

Vitamin products continue to appear with surprising rapidity as further scientific developments in the production of these products are made. Halibut liver oil has given rise to many more new products than we ever had any idea would appear. It will be increasingly difficult for the physician to neglect vitamin therapy as an increasing number of manufacturers steadily bombards him with new vitamin products, and it will be next to impossible for the public to neglect their vitamin supply, in fact they had better carry an over-supply for their own protection.

• • • New and Non-Official • • •

• • •

Too Good To Be True

A subscriber writes in claiming that he saw the following in a Nashville paper:

The Reverend Mr. Strong will preach on: "What Lessons Are We Learning from the Depression."

The Choir will sing: "Search Me, O God."

• • •

What Famous Persons Can Do for Our Industry

As long as Jimmy Walker is going to India he might as well send us a market story on sandalwood oil and blonde psyllium seed.

• • •

Bigger and Broader Markets

Now that decalcomania labels are being marketed to the manicure trade for finger nails, a very natural outlet would seem to be sailors' chests and ladies' backs.

• • •

Dr. Fishbein Again

Cosmetics represent an esthetic rather than a health hazard.

After a crack like this we rather expect the A. M. A. Journal to endorse the "Antoine bob" or the "Patou wave."

• • •

Our Clever Friends

Floyd Triggs of Riegel Paper has fashioned a most unique mailing place announcing a change in telephone number. It says, "We announce another smashing reduction. Everything is down, and now through the splendid cooperation of the New York Telephone Co. we are able to announce a special reduction in our telephone number from 7200 to 4901—a drop of over 30 per cent." Accompanying this is a graph on which the curve is plotted showing the drop from Murray Hill 2-7200 to 2-4901.

And E. V. Carlquist of Armstrong Cork reports that during a recent convention of firemen in Lancaster a local analytical chemist advertised: "Attention, visiting firemen—firewater analyzed." The chemist, according to Mr. Carlquist, got no firemen's firewater (they are accustomed to risks), but he got himself talked about and now most everyone knows that Lancaster has an analytical chemist.

• • •

A Cosmic Cream?

A subscriber who evidently thinks that Professor Picard ascended into the stratosphere to investigate the cosmetic rays, wants to know if we think these rays will ever be useful in the manufacture of hormone creams.

• • •

The Hand Cream Market

Our service department has figured out that the big demand for hand creams has been due to the fact that most housewives have dispensed with maids during this period of retrenchment.

A Packaging

THE striking contrast between ethical and proprietary packaging has often been remarked. It is so evident that there can be no doubt that the progress made in packaging by the drug branch of our industry has been made largely in the ethical specialty field. This is a curious phenomenon. One would assume that since the ethical package is not intended for display nor is it at first sold to the public direct, the element of design would be relatively unimportant. While on the other hand, since the proprietary is displayed, advertised and sold directly to the public, the conclusion follows that the matter of design should be of paramount importance. And it is, as we shall point out later, but the present condition has given rise to a very curious contradiction. Making the contrast between the two groups still more striking, and at once giving testimony of the value of pleasing package design, is the fact that manufacturers of ethicals devote so much consideration to packaging even when the average ethical is comparatively speaking short lived.

It is a paradox that such a large part of the trade should fail to practice in packaging what it preaches about research and compounding. Since the war American advertising and even scientific literature has had one underlying theme: "progress." In one form or another in advertising, in the daily news, in popular scientific literature, the need for progress is steadily being reiterated; and the old, the unchanged, the static is as steadily being discredited in the public mind.

Regardless of the varied and often conflicting claims made for the industry's products, the one thing upon which all manufacturers agree, expressly or tacitly, is that progress in research is constantly supplanting old remedies with new. The interest of the public in these advances has been whetted to such an extent that a considerable body of popular literature has been built on the idea that progress is necessary, continuous, inevitable. Beginning with Farrell's, "What Price Progress," published shortly after the war by the Chemical Foundation and continuing in ever increasing volume up to Paul De Kruif's "Microbe Hunters" and his latest work "Men Against Death", the work of the research laboratory is being dramatized, progress is being glorified.

Every new chemical or medical discovery is featured by the press. Consider what happened with ephedrine. All ephedrine products were sold at the start as pure ethical specialties with no intention of popularizing them as proprietaries. What happened? The story leaked out that the drug had been used in China for 5,000 years. This gave a touch of romance to a scientific fact. It was what the public liked. And the conse-

Contrast

In an industry which preaches scientific progress it is a curious anomaly that in packaging the reverse is often practised especially in the proprietary field, where progressive packaging should play a vital part in merchandising.

quences was that ethical manufacturers found themselves unable to confine ephedrine products to the ethical specialty class. The public descended upon the drug stores and the result is that everyone now knows what ephedrine is for, and much of it is sold direct even though it is still being handled as an ethical specialty.

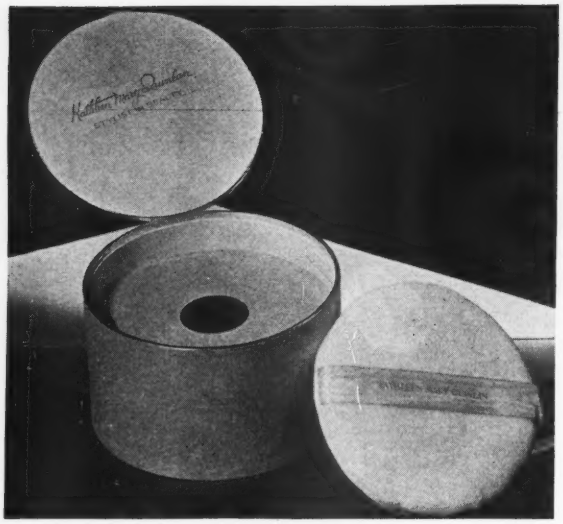
In view of the keen public interest in progress and the concommitant discrediting of all things that have not progressed, which has been the result of the educational work done by the trade, it is an astonishing paradox that so many manufacturers in the proprietary field should cling to negative packaging. By "negative" packaging we mean old time packaging, packaging which is dated in or before the Victorian era. This kind of package proclaims implicitly to the customer that the product it contains has not progressed in common with the other products of the industry. Why must we tell the public of the great advances made in cold therapy for instance and then try to sell it cough syrup in a package which states that it has been in use for sixty years—and looks it?

We of the trade know that many of the old time proprietaries have been kept abreast of the times by means of frequent formula changes. Some firms go so far as to state this fact on the package. But they don't change the package. And on the other hand of course there are many products which research has not yet been able to improve; they're as good now as they were fifty years ago. But the public doesn't know this. Since we are constantly stressing progress people quite naturally assume that everything has made equal progress.

Now we do not mean to infer that no advances have been made in the packaging of proprietaries. In this field there are indeed many excellent examples of progressive packaging. Consider Rem for instance and Pertussin, and Mercirex Mazon, Iodex, Listerine Rub and Ungentine. All of these are well designed and very pleasing packages.

Some manufacturers of proprietaries seem to be aware of the benefits of progressive packaging. Grad-

(Continued on page 472)



The new Kathleen Mary Quinlan dusting powder box (upper left) is developed in pink with silver trimmings.

Merck has adopted a new package for its "Sodium Perborate—Flavored". It is packed in a can (shown above) with a convenient pouring spout closed with a plastic slip cap.

New York Quinine & Chemical Works has adopted the new lithographed can shown at the left for its prescription and household line.

Abbott Laboratories is now offering its "Saline Laxative" to retail druggists in the attractive display stand shown at the left.

At the right is one of Abbott's newest products—"Dicalcium Phosphate"—recommended for use in calcium therapy. The package is the characteristic blue and black and white of the Abbott line.

Mechanical Laxatives

Always interesting is the progress in the field of laxatives readily accepted by both the medical profession and the laity. Bassorin is the latest development in this direction as indicated by this abstraction from the article of F. B. Parsons in the "Pharmacy Journal."

MECHANICAL laxatives, such as agar and liquid paraffin, accentuate the normal physiological processes concerned in the propulsion of the intestinal contents through the alimentary canal and do not involve irritation or direct stimulation of the intestinal wall. They may be divided into two groups: (1) Those which act by softening the intestinal contents, thereby facilitating the propulsion of faecal matter through the intestine. With this group there is not any increase in the bulk of the intestinal contents, and, therefore, no peristaltic reflex is invoked. Examples are: (a) liquid paraffin and other unsaponifiable hydrocarbon oils, and (b) olive oil, which must be administered in sufficient quantities to allow of some free oil reaching the large intestine after it has been subjected to the action of the digestive juices.

(2) Certain hygroscopic substances which are administered in comparatively small volume and which during their passage through the intestinal tract absorb water and expand considerably. As a consequence, the bulk of the intestinal contents is greatly increased, and this stimulates the production of a peristaltic reflex. Examples of this group are psyllium seeds, agar and bassorin, but the hyrgoscopic power of psyllium is so slight that it is difficult to believe that this property is solely responsible for the effects observed.

Liquid Paraffin

Liquid paraffin is the most commonly prescribed physical laxative, and the public consumes large quantities and often continues its daily use for years. It was originally introduced into therapeutics as a substitute for cod liver oil in the mistaken belief that it could be absorbed from the intestine and utilized as fat. It is particularly successful when constipation is characterized by hard faecal masses, and when, as in the case of haemorrhoids, it is desired to produce a well-lubricated motion. As the oil is without irritant action upon epithelial surfaces, including the intestine, it may be administered to infants and to those for whom for various reasons stronger laxatives are contra-indicated.

It is commonly stated that liquid paraffin is an ideal laxative because it is an unsaponifiable hydrocarbon oil which is indigestible and incapable of absorption. Recent observations, however, indicate that liquid paraffin is absorbed from the intestine and is deposited in the liver. The total quantity absorbed must be small, but its importance lies not so much in the fact that liquid paraffin is absorbed from the intestine as in the possible effects which may result from its deposition in the liver.

Although liquid paraffin has been used for so long and so extensively in the treatment of constipation, there is still a lack of unanimity regarding its effects upon the digestion of food and upon absorption of the products of digestion. In practice, the effect of liquid paraffin upon peptic digestion can be modified either by administering the oil in an emulsified form, or by administering foods rich in emulsifying agents, such as milk and eggs, immediately after the requisite dose. The conclusion to be drawn from the reports of numerous workers is that paraffin is capable of inhibiting the digestive action of the proteolytic ferments, but that this action is modified when the oil is emulsified. If liquid paraffin is advised as a laxative, there can be no doubt that it is better in an already emulsified form, because the natural emulsifying power of the patient must vary to a considerable extent. Patients who complain of "seepage" or leakage of oil from the rectum whilst taking a small or moderate dose are evidently incapable of providing the natural emulsifying agents, and probably this defect is also responsible for the loss of weight and digestive disturbances observed occasionally in those taking liquid paraffin.

Emulsions

The following is a typical formula for an emulsion of paraffin with agar:—

	Per cent
Agar	0.7
Gum Acacia	2.1
Tragacanth	0.3
Sodium benzoate	0.2
Flavouring	0.7
Liquid paraffin	50.0
Water	48.0

This composition is capable of considerable variation, and not infrequently other substances, for example, phenolphthalein and magnesia, are incorporated in order to enhance the laxative effect. The amount of agar present is very small and is insufficient to produce any laxative action; 1 oz. of this emulsion contains under 5 grains of agar, a very small dose when compared with the B. P. C. dose of 60 to 120 grains, and the U. S. P. dose of 2½ drachms. (The dose of the B. P., 1932, is 60 to 240 grains.—Editor.) Accordingly any effect possessed by this emulsion in relieving constipation must be in respect of its liquid paraffin content.

The formulae of certain branded emulsions express the agar content in terms of agar jelly, thereby indicating that this substance had already absorbed the maximum amount of water before it is incorporated in the emulsion. In such circumstances agar can possess no further hygroscopic action, and, if we except the slight lubricant effect of agar jelly, the laxative action must again be due entirely to the liquid paraffin content.

When liquid paraffin is administered in the form of an emulsion its taste and natural "oilness" are effectually disguised, but it must be remembered that, in order to secure the same therapeutic effect, the dose of emulsion must be double that of its constituent, and this adds considerably to the cost of the preparation.

Agar

The employment of agar as a laxative was first suggested by A. Schmidt in 1905 on account of its property of absorbing water and of swelling in the intestine, thus initiating a peristaltic reflex. At the present time it is seldom prescribed to be taken alone, but not infrequently it is administered either as a constituent of paraffin emulsions or as an excipient in some aperient pills. In both instances the amount of agar taken is so small that it is difficult to credit it with any laxative action. When agar is to be administered alone, it should be prescribed in the form of the chopped substance, for it is believed that powdered agar produces intestinal irritation, an effect which is inadmissible when a purely physiological action is desired. It must be taken in comparatively large quantities; 2 tablespoonfuls of the chopped substance representing, approximately, the usual dose of 10 gm. (2½ drachms).

One gramme of agar absorbs 13 cc. of distilled water in twenty-four hours, and one observer found that 10 cc. of chopped agar weighing 1.65 gm. expanded to 60 cc. when placed in contact with distilled water, but the author was unable to obtain an expansion of more than 22 cc. from the same volume of agar weighing 1.8 gm. in six hours. From these figures it will be appreciated that one tablespoonful of agar, 14 cc. or 2.5 gm. approximately, is capable of expanding to 34 cc., and this gives some indication of the bulk available in the faeces for instituting a peristaltic reflex. It is stated that in man 10 to 20 per cent. of agar ingested is digested and absorbed, while another observer considers that herbivora can utilize 50 per cent. If agar is digested and absorbed in the intestine, a proportionately less amount is available for the purpose for which it was administered.

It was not possible to demonstrate any delay in either peptic or pancreatic digestion, and it appears that agar does not delay either of these functions in vitro. Agar can be detected readily in the faeces, and the swollen gelatinous granules can be seen with the naked eye. Microscopical examination does not prove that these contain ingested particles of food, and the available evidence indicates that agar is entirely without effect upon the digestive functions. It is probable that agar expands to the same degree in all parts of the alimentary tract. Klecker found that there was little variation in the final volume when agar was placed in contact with distilled water, tap water, acidulated pepsin solution, and an alkaline solution.

Bassorin

Bassorin is a hygroscopic substance which has recently been introduced into therapeutics as a laxative. It is a vegetable mucilage, insoluble in water, being the dried juice of a tree of the astragalus species (stercualiacia), which is indigenous to Africa, Persia, Syria, and Kurdistan, and it is commonly seen in the form of white amorphous flakes or granules. Bulk for bulk, bassorin is much heavier than agar, and, although there is a slight variation in different samples, it can be ascertained that the average weight of 10 cc. of bassorin is 7.4 gm., whilst the weight of the same volume of chopped agar is only 1.8 gm. Experiments indicate that bassorin has a much greater capacity than agar for absorbing water, and its efficiency, therefore, is correspondingly increased: 1 gm. absorbs 28 cc. in twenty-four hours. When bassorin is allowed to absorb water the resulting product resembles a jelly which is softer in consistency than that produced by agar. Neither free starch nor undigested meat fibres could be demonstrated in the stools examined, and this fact affords confirmatory evidence that bassorin has not any effect upon the digestion of food. An aqueous extract of bassorin can be injected intravenously into a rabbit without any ill-effect whatsoever, thus affording strong evidence that this substance is free from any toxic properties. Neither has it any irritant action upon the intestinal mucosa.

Swollen gelatinous particles can be observed in the faeces with the naked eye, and microscopical examination shows that they contain neither undigested nor partially digested particles of food.

Bassorin is therefore a mechanical laxative which is considerably more effective than agar. It is entirely free from the objections possessed by liquid paraffin, in that it has no action upon the digestive processes. One teaspoonful of bassorin, in the basis of the figures quoted above, is equivalent to two tablespoonfuls of chopped agar, and these quantities will expand to the same volume. Both of these substances are, so far as can be ascertained, without action upon the digestive processes.

Dangers in Cosmetics

That there are offered for sale cosmetics which are not what any person should use is clearly stated by W. R. M. Wharton, Chief, Eastern Division, Food and Drug Administration, who gave this information to the public over the radio. Mr. Wharton also clearly states the limitations of the control of his department over cosmetics.

THE Federal food and drugs act regulates foods and drugs. Drugs are defined as any product named in the United States Pharmacopoeia and National Formulary, and any product sold for the cure, mitigation or prevention of disease. Some cosmetics and toilet preparations become classifiable as drugs because they are sold for the cure of conditions recognized as disease, while others become so classifiable because their labels make incidental claims of benefit in conditions of disease. Products labeled and sold only for toilet, cleansing, or beautifying purposes—or for hair dyeing or hair removing—or sold as adjuncts to beauty alone, are not subject to the provisions of the Federal food and drugs act. But if any such products make claims of curative value for any disease they become subject to the requirements of the Federal food and drugs act. This is a very important distinction. Otherwise the cosmetic industry is unregulated by specific Federal law, and by local laws in only a few states and cities. In the case of drugs the food and drugs act, does not require a declaration on the label of the formula or even a statement of the ingredients of the product. The law does require the presence of certain narcotic and habit forming drugs, including alcohol, to be declared, but the only one of these ordinarily used in cosmetics is alcohol. But if any statement of composition or ingredients is made voluntarily, such statements are required by the food and drugs act to be true to fact.

The food and drugs act does not require a declaration on drug labels of the presence of dangerous ingredients other than the eleven specific narcotics and habit-forming drugs, and their derivatives, enumerated in the law. It does not require the label to warn the public that the use of the product may be attended by danger even when such is the case.

Label claims of curative, corrective, or beneficial value of drugs must not be false and fraudulent; but the food and drugs act does not regulate at all the truthfulness of label claims of cosmetics not classifiable as drugs. Hence, insofar as the food and drugs act is concerned, the labels on cosmetics—not classifiable as drugs—do not have to tell the truth, and there is no limit to the extent to which such labels may go in the practice of deception.

The Federal food and drugs act does not apply to advertisements in newspapers, magazines, on billboards, or by radio. It applies only to labels and circulars that accompany packages of foods and drugs.

The cosmetic industry in the United States is a tremendous one and, on the whole, a legitimate one. The vast majority of cosmetics sold are legitimate products of high quality and are safe to use. The large and reputable manufacturers are carefully and scientifically controlling their manufacturing operations to produce products of merit and unquestioned safety. There are—I am sorry to say—some unethical operators in this business who mislead with false label promises of benefits which their preparations cannot possibly perform and, who, worse still, employ poisonous and dangerous drug and chemical substances in their products. There are some manufacturing adventurers who are ignorant of the dangers of their own concoctions. There are some who, though aware of the possible injury that may result to innocent purchasers through the use of their potent poisons, lull their consciences to forgetfulness with their bookkeepers' balance sheets.

Many of the articles on milady's dressing table are innocent aids to a charming and lovable appearance; while some may owe their efficiency to dangerous drugs and chemicals.

The preparations most likely to contain dangerous ingredients are: hair dyes, hair tonics, dandruff re-

movers; hair beautifiers, freckle removers, skin peelers, skin bleaches, depilatories, and personal deodorants.

Scalp treatments practically always are subject to the terms of the Federal food and drugs act because they are used for conditions known as disease. A great many such products contain alcohol and this is required by the law to be declared on the label as percentage by volume. The food and drugs act prohibits any false and fraudulent claims of curative effects on labels, and since the possibilities of real benefit from the use of all such articles are quite limited—and since some of them are essentially worthless—it has been necessary to institute a large number of prosecutions against makers of this class of remedies because of false and fraudulent curative label claims.

Hair Tonics

Notwithstanding this, false claims of curative value will still be found on labels of so-called scalp treatments, and the like, because the Federal Food and Drug Administration has not yet been able to reach all of these, and besides many are purely local products—not shipped in interstate commerce—and therefore not subject to Federal regulation. Hence, one should not believe that all curative effects promised on the label will invariably be produced. The labels must be read and any extravagant claims made thereon must be discounted very largely: for example, one cannot believe promises of cures for baldness since, according to the consensus of medical opinion, there are no drugs nor combinations of drugs known to science which will of themselves cure baldness.

Frequently, arsenic compounds, salicylic acid, resorcinol and cantharides are found in hair tonics and dandruff removers. I would not perform my duty if I did not say that use of these substances may be dangerous. They sometimes cause skin poisonings of a serious nature. None of the substances I mentioned are required to be declared on the label. Some labels disclaim them, but such disclaimers are not always complete, and, I am sorry to say, not always true. Then, too, a label which disclaims one or more of them may indicate the presence of others by failure to disclaim them.

Freckle removers, skin peelers, bleaches, and whiteners: are practically all inherently dangerous if they are really effective. These preparations may contain ammoniated mercury, corrosive sublimate carbolic acid, arsenic compounds, or salicylic acid; any one of which may prove disastrous to those with tender skin or who possess idiosyncrasies. These substances act by setting up inflammation which removes the outer skin. One will use preparations containing them at her peril. Many commercial preparations sold as skin bleaches and freckle removers have been proceeded against as violative of the Federal food and drugs act when they bore medicinal claims, and when labels declared them to be harmless or safe; for products containing such mercury salts, carbolic acid, arsenic compounds, or salicylic acid are actually dangerous.

Depilatories practically never become amenable to the terms of the Federal food and drugs act since the labels do not make curative claims. Their active ingredients generally consist of sodium, potassium, strontium, calcium or barium sulphide, all of which are hair solvents; and chemicals strong enough to dissolve hair often dissolve the skin as well. In some cases they produce irritation.

Thallium Acetate

Another substance sometimes used for hair removal purposes is thallium acetate. It has long been known that this substance is extremely poisonous—being only slightly less toxic than arsenic. An interesting manifestation of thallium acetate poisoning, when the chemical is taken internally, is that falling out of the hair always follows. Depilatory preparations containing thallium acetate are usually made up as creams or pomades, and are of course sold under fanciful names. They contain up to 5½ per cent. of the chemical. The sale of such depilatories is generally accompanied by the claim that they kill the roots of the hair and that results are permanent. I have permission to quote Dr. S. Danna Hubbard—a well-known New York authority—who has done a great deal of splendid work for the New York City Health Department in unmasking dangerous cosmetics. Dr. Hubbard says that thallium acetate is an extremely dangerous chemical substance and should not be used by the public for dipilatory purposes either externally or internally. He further says that its hair removal effects are not permanent.

Perhaps the most innocent of the depilatories is the combination of waxes and resins which are applied hot, allowed to cool, then stripped off, pulling the hair out.

Personal deodorants often contain astringents, such as aluminum chloride. They act by checking perspiration. In some cases they have a tendency to cause skin irritations.

Generally speaking, *lipstick* and *rouge* may be regarded as essentially harmless.

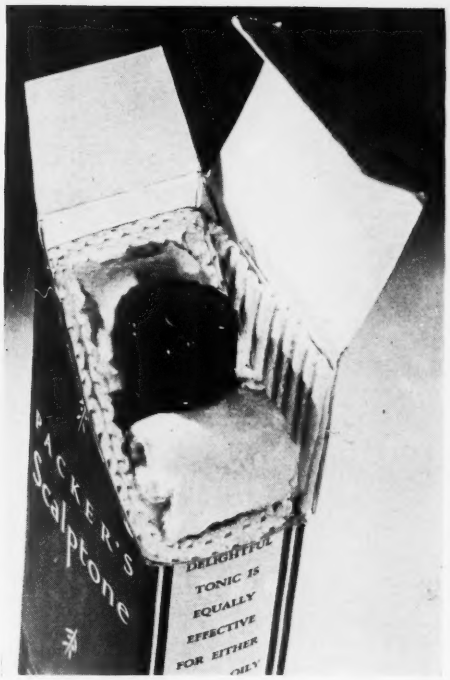
Hair Dyes

Hair dyes, seldom bear label claims that make them classifiable as drugs within the meaning of the food and drugs act. The ingredients of such articles are practically never stated on labels and yet the public ought to know the names and properties of the ingredients that may be expected to occur in hair dyes.

Hair dye labels never state in unequivocal terms that their use may have skin poisoning and disfiguring effects. Hair dyes fall into four types: (1) The type which contains aniline dyes—those are perhaps the least dangerous, but even these are capable of causing acute skin irritation. (2) The type which contains lead compounds, usually with sulfur. These sometimes cause serious cases of local and systemic lead poisoning. (3) The type composed of ammoniacal salts of silver. This type may blacken large patches of skin and may cause acute skin irritation. (4) The para type in which

(Continued on page 474)

Stanco is offering its new "Cream of Nujol" packaged as shown above in a squat, wide-mouth bottle with folding carton.

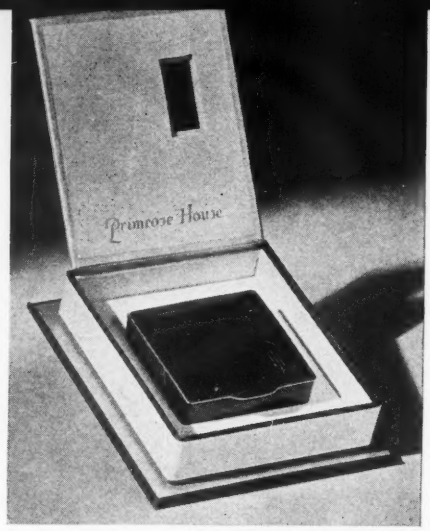


The above photograph shows the ingenious method used to protect the bottle of Packer's "Scalptone." Courtesy Kimberly-Clark, Corp.

The new "Barrington Hand Cream" is packaged in the pink and white tube shown below, with folding carton to match. In addition to the 10-cent and 25-cent sizes in tubes, the North American Dye Co. also markets a 50-cent and $1-size in jars.

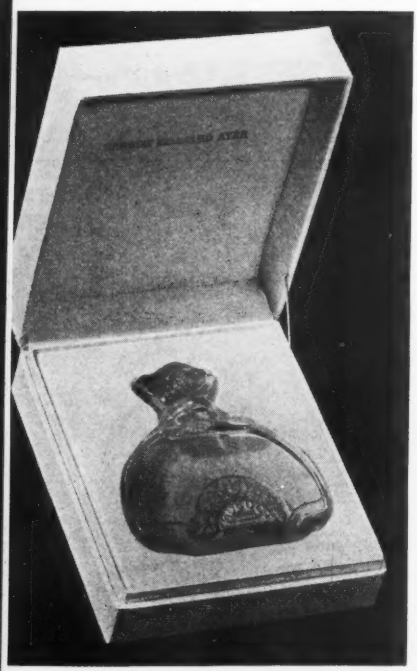
Charles of the Ritz has added two new products to its line—a liquid, "Sensitive Skin Cleanser" and a "Velvet Texture Cream Ritz"—packaged in the characteristic packages shown below.

Reproduced above is the newly restyled "Cara Nome" treatment line. The package is featured by the lustrous brass closure embossed with a miniature of the "Cara Nome" trade-mark.



A small black enamel case with silver tone decorations including the characteristic "PH" monogram has been chosen by Primrose House for its new loose powder compact. The rouge is contained in cake form in the cover which has a separating mirror from the base. The case fits into a groove in a very attractive pink, black and silver box. When the lid is closed a small oblong cellophane window permits of the "PH" monogram on the compact to show through.

Thinc is now marketing its hand cream in a 25-cent size and a 10-cent size jar like that shown below.



"Muguet" is the latest addition to the Harriet Hubbard Ayer line of perfumes. The distinctive shaped bottle shown in the illustration has a hand cut floral design around the gilt label carrying the perfume and company name. This design is repeated in the stopper. A cream colored jewel box with the Harriet Hubbard Ayer trade-mark in gold has been selected for the container.

What's New in Medicines

Our search of foreign countries for new drug products which reveal the trend of medicine abroad is gradually becoming wider in scope.

Tophimalin—Salve containing phenyl-quinolin-carboxylic acid, camphor, oil of pinus sylvestris. For rheumatism, gout, neuralgia. (See Pharm. Presse, 1932, page 74). Made by Chemische Fabrik Dr. R. Jung, Heiligenhaus, Bez. Duesseldorf, Germany.

Tussut With Codeine—Each pastille contains 0.005 gram codeine phosphate in addition to tussut (see Pharmazeutische Zentralhalle, volume 72, page 811, 1931). For catarrhs in bronichial tubes, throat and larynx.

Veralgit—Contains 0.002 gram of codeine phosphate, 0.0135 gram of dibromopropyl-allylmalonyl-urea (new barbituric acid compound), 0.0065 gram of dipropylmalonylurea and 0.08 gram of dimethylaminophenyldimethylpyrazolone per 0.1 gram tablet. Internal analgesic and sedative in pain and nervous irritations. Made by Chemische Fabrik Krewel-Leuffen G.m.b.H., Eitorf, Germany.

A-Vitamin Degewop—Oily solution with 1,500 Rosenheim units per cc. For seborrhoidal eczema as prophylactic for children and adults subjected to infection. Made by "Degewop" Gesellschaft Wissenschaftlicher Organ-praeparate A.G., Berlin,-Spandau, Germany.

Combustin Hamorrhoidal Uvulae—Contains bismuth compound, zinc oxide, witch hazel extract, anaesthesin, peru balsam, coconut oil. For hamorrhoides. Combustinwerk Eulitz & Co., Faehrbruecke i. Sa., Germany.

Iodo-Valerianate-Nagelstein—Consists of valerian extract dried and deodorized 4.0 grams, valerianic acid 1.0 gram, ammonium carbonate 2.5 grams, potassium iodate 6.0 grams, and enough sir. aur. cort. aqua to make 150 grams. For asthma and hay fever. Chemische Pharmazeutische Laboratorium Nagelstein, Mannheim, Germany.

Ionoiod—Each tablet contains 0.03 gram free iodine and very small amounts of colloidal potassium iodide, which slowly splits off iodine. For iodine treatment of arterio-sclerosis cerebri, and lues cerebri. See Klinische Wochenschrift, volume 11, page 724, year 1932. Made by Oesterreichische Heilmittelstelle A.G., Vienna, Austria.

Ibretten—White tablets, corresponding in composition to natural source of iodine. For arterio-sclerosis, asthma, croup, carbuncles and as defatting agent. Made by Chemische Pharmazeutische Werke Heinrich Welter, Uslar, Germany.

Nisylen—Colorless liquid containing aconite, bryonia, eupator, perfol., sabadilla, officinalis, eucalyptus, phosphorus, ipecacuanha, gelsemium emp., and tartar emetic in homeopathic dilution. For grippy conditions, particularly coughing, sneezing and pains in chest, head and limbs. Made by Dr. Willmar Schwabe Leipzig, Germany.

Ovolax Beans—Contains 0.05 gram of ovaria siccata, corresponding to 0.4 gram of fresh ovaries and standardized to 20 ME, in combination with vegetable laxatives. For climatic troubles, anaemia, chlorosis, amenorrhoea, chronic constipation. Made by Alfred Zwintscher, Heidelberg, Germany.

Polymedia Neuralgica—Tablets containing 0.01 gram codeine phosphate and 0.25 gram each phenacetin and acetylsalicylic acid. For migraine, rheumatism, neuralgia, etc. See Pharmazeutische Monatshefte, 1932, number 4. Made by Polymedia Praeparate, Berlin-Lichterfelde, Germany.

Alginex Tablets—Contains codeine, acetylsalicylic acid, and phenacetin. Apotheker Fritz Michalowsky, Synochem Praeparate G.m.b.H., Berlin, Germany.

Cuproleum—Oily solution of colloidal cuprous iodide, containing either 1 or 3% of active ingredients. For tuberculosis, lupus, etc. Chemische Werke Dr. Klopfer G. m. b. H., Dresden, Germany.

Sedirvan—Tablets containing diallylbarbituric acid, dipropylbarbituric acid, bromodiethylacetamide and milk sugar. Sedative, soporific. Apotheker Fritz Michalowsky, Synochem Praeparate G. m. b. H., Berlin.

Somnifera—Tablets containing codeine phosphate, sodium diethylbatbiturate, phenetidine lactate. Soporific. Same manufacturer.

Dolorosa—Capsules containing 0.7 gram of medicament, composed of 26.7% pyrazolon-phenyldimethylsalicylate, 33.3% dimethylaminophenazone, 6.7% co-

deine and sodium salicylate and 33.3% milk sugar. Analgesic and antineuralgic. Dr. Madaus & Co., Dresden-Radebeul, Germany.

Providetten—Tablets containing phenaceton, acetylsalicylic acid, dimethylaminopyrazolone, 0.15 gram each, 0.0025 gram phenylallylbarbituric acid, 0.015 gram quinine sulphate, 0.0075 gram codeine phosphate and 0.025 gram sodium bicarbonate. For neuralgia, rheumatism, ischias, migraine, grippe, etc. Heilit, Inh. Apotheker Waegner & Goedicke, Salzwedel, Germany.

Silbroform—Contains 0.015 gram each of bromoform and codeine per teaspoonful; also cherry laurel berries, ipecac, and tolu balsam. For tussis, pertussis, grippe, etc. "Dreb," Chemische Pharmazeutische Laboratorium Dr. E. Buchwaldt Siebje, Berlin-Charlottenburg, Germany.

Tiranal 214—Consists of silicic acid ethyl ester, easily soluble resins and chloramine. For caries profunda. (See Klinische Wochenschrift, volume 11, page 967, 1932). Lingner Werke A.G., Dresden, Germany.

Acechin—Tablets containing 0.1 gram quinine hydrochloride and 0.3 gram acetylsalicylic acid. For grippe, etc. Pharmazeutische Laboratrium Adler Apotheker, Reppen, Germany.

Alberlotten—Pastilles containing anesthesin, menthol and borax. For catarrh of respiratory tract.

Alberolin Preparations—ALBEROLIN COUGH SYRUP FOR ADULTS—Coutains fluid-extract of senega, sun dew, etc., also glycerin and fennel water. ALBEROLIN COUGH SYRUP FOR CHILDREN—Contains extract of castan. fluid and other fluid extracts, malt extract, glycerin and honey. ALBEROLIN COUGH DROPS—Contains in homeopathic dilution anisated solution of ammonia and tincture of pimpinella. Albert Apotheke Rudolf Junge, Leipzig, Germany.

Albolax—White pills containing vegetables extracts, for example of aloes, rhabarbarum, etc. Mild laxative.

Alborheumin—Oily solution of methyl salicylate, camphor, chloroform and other anti-rheumatic agents. For external rubbing.

Alliocaps—Garlic macerated in olive oil. Capsules. For digestive and intestinal troubles, diarrhoea, worms, etc. Dr. Madaus & Co., Germany.

Analgeticum Ulmers—Contains chloral, menthol, camphor, various esters of salicylic acid, allyl-thiocyanogen. For stilling pains and hyperaesthesia of skin. Apotheke H. Th. Ulmers Laboratorium, Schongau a. Lech., Germany.

Argel—Glycerin-silver gel containing 2% colloidal silver. Black, thick mass. For antiseptic treatment of carbuncles and similar skin infections. Dr. Friedrich Heise G. m. b. H., Berlin-Karlshost, Germany.

Arsenalistol—Contains phosphatides, sterines, vitamins, mineral salts with 0.01 gram of arsenic per tablet. For anaemia. Dr. Schaer, Zurich, Switzerland.

Azoangin—Contains per tablet of 0.6 gram, 0.036 gram of Azohel (reduction product obtained from diaminoazobenzene and aliphatic oxy-acids, for example citric acid). Strong bactericide for colds. Chemische Pharmazeutische Fabrik Dr. Med. Hubold & Bartsch, Gruenheide, Germany.

Belladonna Obstinol with Papaverin—Contains 50% pure liquid paraffin, glycerin, binding agent, aromatic correctives, 0.02 gram extract of belladonna and 0.02 gram papaverin hydrochloride per teaspoon. Light brownish emulsion. For spasmodic constipation. Chemische Pharmazeutische Laboratorium Dr. Hermann Thiemann, Luenen in W., Germany.

Bengko Bonbons—Sugar-coated bonbons containing menthol, oil of eucalyptus, anaesthesin, potassium sulfoguaiacolate and extract of licorice. For coughs, etc.

Bengko Cachets—Contains quinine, caffeine, analgesine salicylate, aminophenazone, and magnesium oxide. Treating migraine, etc. Fabrik Chemische Pharmazeutische Praeparate Heinrich Baum, Ravensburg, Germany.

Bonaerol—Powders containing silica, calcium glycerinophosphate, ephedrine, terpine hydrate pyrenol, and sugar. For asthma and tuberculosis, etc. Apotheker C. Hoeing Fabrik Chemische Praeparate, Solingen-Graefrath, Germany.

Enelbin—Kataplasma antiphlogisticum. Contains anhydrous glycerin, aluminum silicate, boric acid and salicylic acid, each 0.5% also essential oils. Cement-like paste. For inflammations of all sorts. Fabrik Pharmazeutische Praeparate S. Neumeier, Frankfurt-am-Main, Germany.

Hythermine Salves—IOD-HYTHERMINE — Contains 1% iodine, 2% potassium iodide and 97% hythermine salve base. Treating carbuncles, acute gout, etc. GYRDAL-HYTHERMINE — Contains 3% gyrdal, and 97% of salve base. GYRDAL—Distillate from bituminous shale which encloses deep sea fish, gyrodus titanus. Containing 10% sulfur in organic combination. For treating gonorrhoeal articular rheumatism, rheumatic exudates, etc. SULFUR-HYTHERMINE —Contains 2% precipitated sulfur, 2% gyrdal, and 96% salve base. For acne rosacea and vulgaris, psoriasis, eczemas, etc. BISMUTH-HYTHERMINE —Contains 3% bismuth subgallate, 2% humic acid, 2% precipitated sulfur, 1% salicylic acid, 3% gyrdal and 92% of salve base. For neuralgia, pleuritis exsudativa, contusions, etc. HYDRAGYRUM-HYTHERMINE —Contains 2% ammoniated mercury and 98% salve base. Removing freckles. Chemische Fabrik Hygeia Gesellschaft m. b. H., Dresden, Germany.

Iodetta—Mouth wash powder. Mixture of salts resembling natural source of iodine with peppermint oil, menthol and sage extract. Used in water for washing mouth and gargling in inflammatory paradentosis, gingivitis, etc.

Laxostol—Tablets containing phosphatides, sterines, vitamins, mineral salts, extract of colcocynth and aloes. Dr. Schaer, Zuerich, Switzerland.

Ulmosat—Solution of creosote lactate, calcium lactophosphate, aconite, ipecac, codeine. Apotheke H. Th. Ulmers Laboratrium, Germany.

Fineural—Tablets. Contain 0.2 gram bromoisovalerianylurea, 0.2 gram pyrazo-lon-dimethylaminophenyldimethyl, 0.005 codeine phosphate, 0.01 gram elixir belladonna. Analgesic. Dr. Oehren & Co., Berlin, Germany. See Deutsche medische Wochenschrift, 1932, page 1565.

Diginutin—Solution of total glucosides of digitalis leaf free from extractive matter. Tabloids. Burroughs-Wellcome & Co., London, England.

Karvol—Chlorocarvacrol. Similar to thymol but has higher phenol coefficient because of presence of chlorine atom. For septic mouth and throat. Gargle, mouth wash, spray. Crookes Laboratories, London, England.

Moogrol, Iodized—Mixed esters of acids of chaulmoogric series containing 0.5% iodine. Addition of iodine reduces irritating properties of esters. For leprosy. Burroughs Welcome & Co.

Sciatago—Dragees containing cinchophen, hexamine and glycocoll. For rheumatism. Coates & Cooper Ltd., London, England.

Stipolac—Sodium tetraiodophenolphthalein. Radiographic examination of gall bladder. Burroughs Welcome & Co.

Multibral—Sodium monobromooleate. For nervous troubles. More intense than inorganic bromides and free from secondary toxic effects. Coated pellets. Dose, one to three daily. H. R. Napp Ltd., London, England.

Decholin—Dehydrochloic acid, oxidation product of cholic acid derived from natural bile acids.

Decholin Sodium—Sodium dehydrocholate. For functional insufficiency of liver, to outline bile dusts in operation and in cholecystography. Also administered in combination with synthalin in diabetes to prevent gastro-intestinal disturbances.

Detensyl—Capsules for oral administration. Contains extracts of liver, pancreas and living tissue with mistletoe. Treating hypertension. Continental Laboratories, London, England.

Dilaudin—Dehydromorphinone hydrochloride. Possesses advantages over morphine.

Entodon—20% solution of hexamethydiaminoisopropanol biniodide. Parenteral administration of iodine. Bayer Products Co., London, England.

Ephazone—Tablets containing combinations of ephedrine and amidopyrine and benzyl compounds. For oral administration in asthma and bronchial affections. Ephazone Co., London, England.

Eulaxase—Tablets containing biliary and intestinal secretions, agar-agar, and bacillus acidophilis. Constipation. Allen & Hanburys Ltd., London, England.

Quinoplasmine—Contains plasmoquine 0.01 gram and quinine sulfate 0.3 gram. Malaria. Bayer Products Co., Ltd., London, England.

Selvadin—Isotonic solution of calcium-sodium pyrocatechindisulfonate containing 9 grams of calcium per cc. Treating hypocalcaemia (See Deutsche Med. Wochenschrift, 1932, pages 408 to 411.

Zoin—Calcium salt of amino-phosphorus acid compound which occurs in milk casein. Tablets 0.25 gram each. Solution 0.25 gram per cc. Dose up to 2 grams daily. Clayton Aniline Co., Ltd., London, England.

Mercolloid—Colloidal mercury sulfide containing 0.01 gram per 2 cc. For syphilis. Coates & Cooper Ltd., London, England.

Sulfosin-Leo—One per cent solution or suspension of sublimed sulfur in olive oil. For production of pyrexia in neurosyphilis. C. L. Beucard Ltd.

Spirobismal—Suspension in olive oil of quinine-bismuth iodate and sodium-potassium bismuthyl-tartrate and camphor. For syphilis. E. H. Spicer & Co. Ltd.

Bisoxyl—Suspension of bismuth oxychloride containing 0.1 gram per cc. of substance plus chlorobutol, added as an analgesic and preservative. For syphilis. British Drug House Ltd.

Locasemin—Contains para-aminobenzoyldiethylaminoethanol hydrochloride in place of cocaine. Dr. Albert Bernard Nachf., Berlin, Germany.

Menosan—Contains codeine phosphate in place of tincture of opium. Chemische Werke Solln G.m.b.H., Solln bei Muenchen, Germany.

Menthocologne Pencils—Pencils containing menthol, camphor, essential oils of eau de cologne, etc. For headaches, sneezing, etc. Chemische Pharmazeutische Werke Heinrich Eelter, Uslar, Germany.

Neumigrin—Tablets containing caffeine, dimethylaminophenazone, phenazone and phenacetin. Antineuralgic. Pharmazeutische Laboratrium der Adler Apotheke, Reppen, Germany.

Neurolatin—Solutions of organically combined iron, lecithin, vegetable extracts and taste correctives. Tonic. Albert Apotheke Rudolf Junge, Leipzig.

Oljecorin—Cod liver oil emulsion with vitamin content controlled by niological test with addition of sodium hypophosphite. For rickets, etc. Dr. Madaus & Co., Radebeul-Dresden, Germany.

Poehl 35—Preparation from udders and spleen of pregnant animals. In ampulles. In cancer therapy for killing protoplasma of tumor cells.

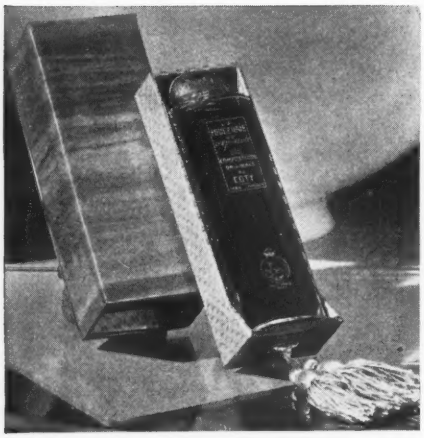
Pyraveron Benko—Tablets containing diethylbarbituric acid, aminophenzaone and caffein. Each weighs 0.4 gram. Analgesic. Fabrik Chemische Pharmazeutische Prepaerate Heinrich Baum, Ravensburg, Germany.

Racefo—Powder. Contains 0.05 gram theophyllinethylenediamine, 0.05 gram caffeine, 0.0025 gram agaric acid, 0.015 gram synthetic racemic ephedrine, 0.01 gram extract of belladonna, 0.01 gram dimethylaminopyrazolone. For asthmatic pains. Dr. Nuszbaum & Co., Chemische Fabrik Wuerzburg, Germany.

Ramisin—Syrup, containing extracts of botanicals having sedative, digestion-accelerating action, and bromoform and codeine. For whooping cough. Dr. Koenig G.m.b.H., Muenchen, Germany.

Sokapen—Brownish black salve containing capsicum, salicylic acid and other organic substances. For muscular rheumatism. Pharmazeutische Laboratorium der Adler Apotheke, Reppen, Germany.

E. R. Squibb & Sons has made two new additions to its cosmetic line. These are a Lanolin Cream and a Cleansing Cream packaged in most attractive fashion as shown at the left.



"**F**ougeraie au Crepuscule" is the latest creation of Coty. It is packaged in an octagonal-shaped, crystal flacon with a flat round "Lalique" stopper. The outer container simulates the rare and beautiful agate-fossilized fern from Japan's Imperial Quarries.

"**E**ssence of Mistol" is a new Stanco product, an inhalant to complement "Mistol." This new product is reproduced at the right.

Abbott Laboratories has added two new products to its line packaged in characteristic Abbott fashion. They are "Haliver Malt with Viosterol" and "Cofron Elixir."

Manufacturers and Retailers Must Agree

By S. S. Dworkin

Mr. Dworkin clearly indicates the position of the retail drug trade today, and the increasing potency of the private brand method of retaliation against manufacturers who do not control prices. He is anxious to create a common meeting ground on which some compromise legislation can be worked out. Manufacturers will do well to read and answer Mr. Dworkin's statements.

THE army of private brands has mobilized and is invading the market for drugs and cosmetics in a manner which promises to become increasingly devastating for the manufacturers of advertised merchandise. The government figures prove this fact in reporting a tremendous increase in the sale of this class of merchandise. Commercial publications are increasing the amount of editorial attention which they are giving to the subject. Sales managers and other executives of manufacturers of nationally advertised brands who are feeling the savageness of this attack are both openly and secretly looking for some method of stemming the rising tide of private brands which, added to the falling volume of sales resulting from the depression, is making the lives of these gentlemen none too rosey.

Manufacturers' complaints of substitution and switching are heard from all parts of the country. Large sums of money are being spent by manufacturers in a determined effort to combat this movement. Advertisers have been devoting a greater portion of their space to warn the public against the "just as good" methods of selling. Some advertising agencies have gone so far in the direction of this sort of copy that they have cast slurs upon the retail druggists openly calling a large part of them cheats. In street cars and subways there are displayed cards with warnings against substitution. In short, one of the main methods of attack upon the part of manufacturers is a plan of public education. How effective this method will be, only time will tell. The fact remains that the price differential between private brands and advertised merchandise remains sufficiently great strongly to induce the public to consider seriously the statement, "When you buy that product you have to pay for the heavy advertising which they do."

Some leaders among the manufacturers with national reputation are attempting to belittle the government figures as an indicator of a rising trend toward private brands, arguing as to classification of private and nationally advertised brands. They appear to forget one important point: if a group of retail distributors should push their own brands with the same methods as those employed by manufacturers of nationally advertised goods, what would be the difference?

To make a stronger impression upon the public, manufacturers are wont to use the word "substitution" instead of "switching." But the truth is that switching is going on and private brands are increasing in favor with the retailers, and, most important of all, the buying public is accepting the private brands in greater volume despite all the propaganda against this class of merchandise.

While to many manufacturers the condition is tragic, there is also a comic side when it is realized that many of the manufacturers who are fighting switching tooth and nail, and who are calling the retailers "substitors," are in fact themselves manufacturing private brand merchandise for the retail druggists, and are supplying these retailers with merchandise which has all the

benefits of the latest scientific research, tested formulas, packaging attractiveness. Thus the advertised brands and the private brands turned out by these manufacturers have only one slight, but important difference—the selling price.

Private Brand Prices

It would be impossible to quote all the prices given me by various manufacturers for a line of private brand merchandise. To illustrate I present the quotation of one manufacturer:

Shaving Cream (Jumbo Size)	$1.20 doz.
Talcum for Men	.96 "
Hair Gloss	1.08 "
Shaving Lotion	1.26 "
Coconut Oil Shampoo	.75 to 1.08 doz.
Dandruff Remedy (12 oz.)	1.00 to 2.40 doz.
Magnesia Tooth Paste (25c)	8.00 gross
Shaving Cream (heavy lather, large size)	11.00 gross
Magnesia Tooth Paste (Jumbo size)	12.00 gross
Iron Tonic	2.40 doz.
Cough Syrup (4 oz.)	1.20 doz.
Aspirin Tablets (12's, metal boxes)	3.25 to 4.00 gross

The indicated retail selling prices of the above items are almost sufficient argument for the public to buy them under present day conditions when the family budget is reduced and lower prices are necessities. In addition to this, the necessity that the retailer make a profit on his sales—which are greatly reduced in number—adds to the public urge to cut expenditures in drug store purchases and in the main overcomes the effect of the advertising being done by manufacturers to offset the differences in prices.

So far as trade discussions are concerned, I regard them only as a battle of words with no effective result. War between nations or between various branches of trade is wasteful and not in the best interest of either the trade or the public. It would be far better if all the branches of the trade were harmonious and striving to advance the interest of the trade and the interest of the public which it serves. But the battle of words has gone for many years, and there is no possibility of its resulting in any constructive action unless both sides see the necessity for action, or unless one of the combatants is forced to the wall.

Outstanding Points

In an effort to bring about a more harmonious condition which might eventually lead to a removal of a condition which is most distasteful to both the manufacturers and the distributors, I wish to point out some outstanding points that need correction, and also ask some questions which I hope will be answered in the spirit in which they are asked.

1. Retail pharmacists, confronted with competition from all sides, but somehow braving the tremendous casualties and defending themselves in the present chaotic condition, are confronted with the most vicious form of competition by manufacturers who are selling their own products in their own retail outlets, at prices which are in some instances below list. These manufacturers also make special drives and offer combination sales of these products through their own retail outlets but do not offer these same terms and opportunities to other distributive outlets. In my opinion this is unlawful, and some day, I hope it will be fought out and eliminated.

Price Legislation

2. Next to the literature on the World War, the literature on price maintenance and the Capper-Kelly Bill must be the most voluminous. I have no desire to go into the details of this legislation, but would like to ask for the compilation of an honest Who's Who on this legislation. The reason for this request is that I know that many manufacturers who support this bill in their communications with retailers, whose activities at their own meetings are such that they are working directly any possible chance of passing this bill.

It is a known fact that Charles Wesley Dunn, counsel for the American Pharmaceutical Manufacturers' Association, and the Grocery Manufacturers' Association, has offered a substitute bill for the Capper-Kelly Bill. This legislation would amend the Federal Trade Commission Act so as to make it illegal to sell below cost. This proposal is aimed directly at predatory price cutting in the retail trade. I would like to know how many manufacturers are sincerely in favor of Mr. Dunn's proposal rather than in favor of the Capper-Kelly Bill.

3. It is appreciated by all branches of the trade that the variety shops, cosmetic shops, toilet goods departments of five and ten cent stores and of department stores are a distinct menace to the retail druggists. Some manufacturers of various items are especially adapting their business to supply these stores through the creation of special sizes especially for that trade.

Outside Distributors

In the race for volume, manufacturers engaged in competitive madness and policies which were directly opposed to the interests of their primary outlets—the retail druggists. Manufacturers took to themselves as distributors the general, grocery, five and ten, cigar, cosmetic department, and almost any type of store as distributors of drugs.

Was the development of these additional distributive channels a step in preparation for a defense against the revolt bound to come from retail druggists against the unfair policies of the manufacturers, or was it an attempt to halt the march of the business in private brands?

Probably the move did and will continue to stop this march for a certain length of time, but these advantages should be immediately discounted since each one of these distributive channels quickly develops its own private brand items to displace the products of those manufacturers who put them into the business.

Grass-Green for Protection

After drug manufacturers have long been of the opinion that amber glass was an excellent protective against deterioration from light rays, along comes Mayne R. Coe, of the Department of Agriculture who proves that a grass-green color is superior to any other for this purpose. Will his discovery open up a new era in packaging drugs, cosmetics and flavors in glass?

DRUGS and pharmaceuticals, perfumes, cosmetics and flavoring materials may be preserved in freshness and strength, color and flavor, and protected against rancidity and deterioration, by use of containers or wrappers of a grass green color, or of black, or of various metallic foils. This principle applies to the products named, and others, containing animal or vegetable oils, fats or waxes. It applies, whether the container or wrapper is of glass, paper, cellulose, or cloth, and whether inside or outside. That is, a flint glass bottle's contents may be protected as above indicated, by wrapping it in green, black, or foil, or a green, black, or foil interior wrapper or container may be used.

Takes Out Patent

Above represents the considered judgment of government scientists in the Department of Agriculture, who have been working on problems presented by rancidity for a long time. The chief worker is Mayne R. Coe, of the Food Research Division, Bureau of Chemistry and Soils. Mr. Coe has taken out a public service United States patent covering his discovery that all the rays of light in the spectrum except certain defined green rays cause oxidation, rancidity and deterioration of taste, odor, aroma, and color, and his invention that use of certain green, black or foil covers or containers prevents such deterioration.

Under the federal law of March 3, 1883, as amended April 30, 1928, this patent may be used free of cost by the government, and in fact anybody may use the invention without payment of royalty. Mr. Coe has also obtained a patent from the French government covering his discovery.

While most of the experimental work along the line of protecting from light conducted by Mr. Coe and others in the Department of Agriculture have concerned food products, yet they are sure the same principles apply to drugs, cosmetics, and flavors. Any of these commodities containing fats or oils are injured by light rays, unless protected by containers or wrappers of the colors or types mentioned, government scientists declare, beyond peradventure of a doubt. By the same token, they are equally certain that exclusion of these light rays will preserve the contents of such containers and wrappers against rancidity and deterioration, at least for a considerable time.

The principle may even be carried a step further, states Mr. Coe. Addition of certain chemicals, or of green dye, to products of the classes above mentioned, would have the effect of protecting them against light rays, preventing oxidation. Of course, it is realized that such additions might not frequently be practical. For example, the character of a drug or pharmaceutical preparation might be entirely altered by such an addition. On the other hand, however, a harmless green dye might be added to a perfume, or to some cosmetics without changing their essential character. It is conceivable that such a color might help promote sales in certain cases.

Mr. Coe Explains

Mr. Coe has been good enough to explain the principles involved in his discovery and the way in which they work, for the benefit of DRUG AND COSMETIC INDUSTRY. When undertaking research work into protection of foods against oxidation, which produces rancidity, he found that there were many ideas about rancidity and its supposed causes. Air, heat, moisture and other factors, as well as light, were thought to have bearing upon the problem. One by one, these factors were eliminated in the departmental research work. Ultimately, it was found that light injuriously affects oil-bearing foods and other substances containing oils and fats.

Drugs and pharmaceuticals, in many instances, contain various amounts of oils and fats of vegetable or animal origin, which are liable to go rancid, Mr. Coe pointed out. Tallow and cod liver oil are examples. Castor oil, olive oil, cocoa butter, lard, and various fats and oils entering into drugs and cosmetics come within the category of articles affected by this principle. Any

vegetable oil may be involved, as well as fish and animal oils. Essential oils in perfumes, toilet waters, extracts, are necessarily involved; also soaps and shampoos, and many lotions and external preparations medicinal in character. Salves of many kinds, ointments, catarrh jellies, and many other preparations are concerned. Of the oils, fats and waxes, the only ones not affected by light and oxidation are believed to be those of mineral origin.

Experiments in the Department demonstrated that photo-chemical action is the cause of rancidity, that light causes oxidation and hence rancidity and deterioration. Oxidation destroys the flavor of an article, or its aroma or perfume, according to government scientists. Not all kinds of light, however, produces these undesirable results. It is only the light rays from the solar spectrum outside the green rays having wave lengths lying between 4,900 and 5,600 Angstroms. Light waves within these limitations are beneficial. They include the green band, the shade that may be compared to the chlorophyl coloring in grass and trees.

Luxuriant Grass Green

The particular shade of green that is beneficial in excluding deteriorating light rays is described by Mr. Coe as a "luxuriant grass green." Yellow green or blue green shades are not effective in producing the desired result. Use of what Mr. Coe calls the "true green" color, in glass containers, or in wrappers or packages is effective in protecting the oil or fat bearing contents of such packages from oxidation, rancidity and deterioration. Green having the wave lengths indicated has been proven by the Smithsonian Institute, government scientific institution in Washington, as well as at the Department of Agriculture, to be the particular shade that is effective.

Scientists and representatives of industry see in this discovery the possibility of most far reaching changes and developments in connection with drugs and cosmetics, and flavors. Many of them have been troubled for years by deterioration of their products due to oxidation, rancidity, and loss of freshness or strength, aroma, flavor, color and fragrance. The way is now pointed out to the industries to protect themselves against losses, to improve their products as they reach the consumer, to increase sales, and otherwise to improve conditions in the industries. That way is to pack their products in glass containers of the proper green shade, or to ordinary glass containers in green paper, glassine, or cellulose of the proper shade.

The proper green protective covering excludes injurious rays of light. The same result is achieved by use of black containers, because black excludes all rays of light. So does metallic foil, such as tin, aluminum, gold or silver foil. So would lead foil, but the latter is not regarded by government scientists as suitable for use on many products, because of danger of lead poisoning. Very thin gold foil is said to permit the passage of beneficial greenish light rays. While black is effective as a cover, that color is said to have little sales value for such purposes.

Losses in foods alone, as result of oxidation and rancidity, are estimated as high as $100,000,000 a year. Losses in drugs, cosmetics, flavors is a matter of speculation. Potency of many drug products lies in their oil or fat content. When that becomes rancid, freshness departs and potency may be lost. The idea that the amber-brown bottle protects is said by government scientists to be erroneous. That color permits noxious light rays to penetrate to the contents. Dr. Arny of Columbia University some time ago experimented with various colored filters with a view to determining whether certain colors tended to keep pharmaceutical products from loss of potency and deterioration.

Foods and cosmetics have been found in ancient Egyptian tombs, in comparatively good condition, but they have soon deteriorated and become rancid after being taken out. The answer is found in the effect of light upon those articles. They kept in good condition for thousands of years while buried and protected from light.

Essential and Fatty Oils

Essential oils are the active principle of a perfume. If the oils becomes rancid the perfume is injured. The flavor of an extract is in its oil content. Once that becomes oxidized or rancid, the flavor is destroyed. The freshness and sweetness of cosmetics depends very largely upon the oils or fats they contain. Once the latter are injured, the preparation itself is not good. Freshness is closely linked up with flavor and color. Oxidation and rancidity destroy freshness, and sometimes produce bleaching. Retention of color in pristine beauty is promoted by exclusion of injurious light rays through use of proper green, black or foil covering. So say the scientists.

They go further and express the belief that prevention of rancidity and oxidation tends to preserve the vitamin content of foods and of cod liver oil and other vitamin preparations. It may extend to gland products generally and even to biologics. Not all of these propositions, however, have as yet been demonstrated by official proof. But meanwhile, use of protective covering for vitamin preparations may be experimented with.

The color green is linked up with nature. That is one reason why the proper shade of green is effective in protecting many products from rancidity and oxidation, according to government scientists' theory. It is pointed out that the green leaves of a plant generate formaldehyde, aldehydes, and ketones, to provide nourishment from the air, for the growing plant. Later, when the plant bears seed, fruit or nuts and they are ruptured or ground up, to make food, or oils or fats for various purposes, the action of light in connection with them produces formaldehyde, ketones, peroxides and similar chemicals. In other words, the same things produced by light shining through green leaves are formed

(Continued on page 466)

Impregnated Powders

Impregnation of the ingredients of either medicinal or cosmetic powder preparations is an important step in the production of high quality products. Manufacturers will do well to investigate this method of obtaining products improved in both appearance and action.

WHEN any substance, either in its entire mass or at least on its surface, is mixed or provided with a more or less dense, coherent film of another substance, it is said to be impregnated with the latter substance. The weight or the volume of the impregnated substance, is generally greater than that of the impregnating substance.

Impregnated powder will always have a gentler, more active and more uniform effect than a simple mixture. Therefore, when only a certain strength of the action caused by the added substance is desired, a smaller quantity will suffice.

Impregnation is carried out under best conditions, when a concentrated solution is added to an insoluble and finely pulverized powder. In the case of powders, there is no complete mixing or impregnation possible, but rather a more or less complete covering of the particles of the powder with the impregnating solution. The solvent either evaporates by itself or is evaporated under best conditions in a drying chamber. Under such circumstances the original dissolved substance is precipitated on the surface of the powder, which has been wetted with the solution, in the form of a colloidally fine film.

Water is preferred as solvent wherever possible because of economy. Organic solvents are always more expensive, even when less of the solvent is required, and care must be taken, at least when preparing large batches, against fire and explosion. Satisfactory ventilation facilities must also be provided for the vapors evolved and large heating installations as well as open flames must be avoided.

Impregnation finds use in all cases, where baby powders, wound dusting powders and shaving powders are prepared. In these cases the sensitive skin demands, in addition to the absorbent and drying powders, the protective, healing and skin-improving admixed substances in proportions which can be borne by the skin and are always uniform and sufficiently concentrated.

Difference in quality between a powder made with impregnation and one prepared with dry mixing, can be demonstrated by two differently compounded boric acid powders.

A dry mixed boric acid powder may be prepared in the following manner. Ten parts of fine talcum powder are mixed slowly in mixing machine with one-half part of loose, extremely fine boric acid free from lumps. Uniform mixture can be obtained within five minutes in suitable mixing machine. The mixture will be homogeneous from the technical standpoint. If it is assumed, for sake of simplicity, that size of particles is the same in the talc and in the boric acid, then there will be present in a homogeneous mixture of the above type about twenty particles of talc for every particle of boric acid.

It can scarcely be possible, that extremely fine particles are cut off from the boric acid particles by partially complete trituration lasting for hours long and consuming large quantities of energy, and that these particles are located around the individual particles of talc. Hence, a partial dry "impregnation" is attained in addition to mixing.

If, however, it is assumed that boric acid particles are larger than finely pulverized talc particles—an assumption which is almost always actual truth—, then it is possible, that talc dust surrounds the hygroscopic, coarser and larger particles of boric acid. It therefore follows that the action of boric acid is not manifested immediately after application of powder. In the first place the moisture forming on the skin, or the solvent influences arising from external sources thereon, effect a very slight dissolving action on boric acid. Or the surrounding film of talc is exposed at certain points by strong rubbing, with result that the concentrated boric acid acts too energetically. It follows that, due to certain conditions which cannot be controlled and cannot be foretold, the action of the boric acid may be partial or occasional, too slow, too weak or too strong.

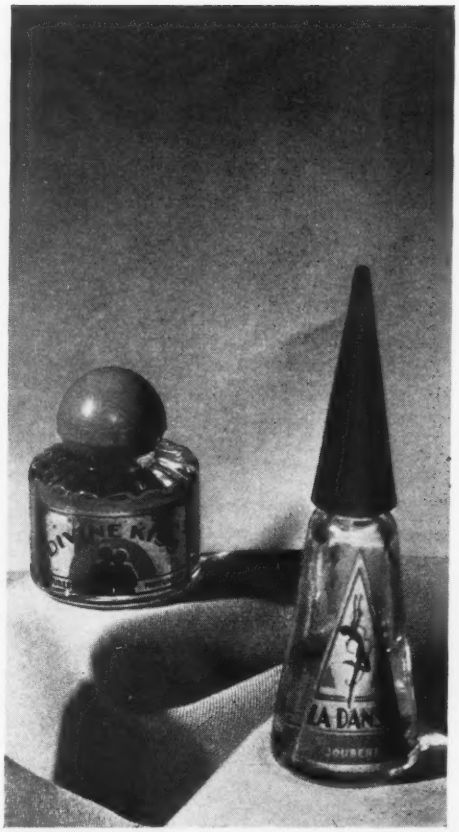
A "wet" impregnated powder, containing 1% of boric acid, behaves in an essentially different manner.

(Continued on page 466)

MacAndrews & Forbes is marketing a new licorice cough mixture, "LicoLin," packaged as shown at the left.

The Hemafil Co., Detroit, is one of the first to offer a product which makes use of the direct application of chlorophyll in medicine. The package is shown at the right.

Parks Products is marketing a new product for foot comfort, "Ne-O-Ped," packaged as shown at the left. Courtesy of Owens-Illinois Glass Co.



Joubert has recently introduced the attractive line of perfumes packaged as shown at the right.

Make-Up Preparations

Part II

This completes the article which started in the October issue covering this important group of cosmetics. The various types all make-up cosmetics are given together with the ingredients of all products.

LIP rouges are commonly divided into two general classes: cream rouges and permanent rouges, the latter being the type usually referred to as paste rouge. The cream rouges are usually of a lighter consistency and are recommended for dry skins, the paste rouge for oily skins and for evening wear. Some of the cream rouges are made with a vanishing or non-greasy base, the others commonly are emulsified waxes. Before discussing the composition of certain typical formulas, it is well to emphasize that lip rouges often do not go over simply because manufacturers fail to educate customers on the proper method of application and the selection of the right shade for a given complexion. Instead of marketing a rouge pat without any instructions as is the usual practice it is advisable to design the package so that a little circular giving proper directions can be included.

One of the most constructive steps that the industry could take would be to standardize on color terms, on varieties, on directions. The lack of this contributes to the confusion of this market. Every manufacturer seems to have his own conception of what for instance the term "medium" means, and there is also a lot of contradiction in the suggestions given for the selection and application of rouge.

There are on the market far too many shades for practical purposes, too much erroneous teaching. In reading the literature published by a good many of the leading houses one is inclined to the opinion that small respect is entertained of the intelligence of modern women. In short, many manufacturers seem unable to realize that the industry has grown up, that it is a practical business and it should be conducted on a sound basis. In respect to the conflicting opinions about colors, selection and application of rouge some manufacturers must be right and some must be wrong. It does not seem impossible for the industry to agree on a proper terminology and a proper procedure, and if it did there is no doubt that all would be benefited.

The following formulas illustrate the materials commonly used and provide a basis for research. As rouges are quite difficult to make it is not to be expected that experimenters will produce acceptable results without modifying these formulas as experience and judgment dictates. Common difficulties are that rouges are apt to sweat, crack or change color. To guard against these difficulties temperatures should be controlled within five degrees either way, the colors should be properly milled and the pats should be filled very quickly.

LIP ROUGE—Wax Type

White Wax	40%
Spermaceti	28%
Mineral Oil	24%
Petrolatum	8%
Color and Perfume to suit	
	100%

Procedure: Mix the color with the petrolatum and mill it thoroughly. Melt the waxes and the mineral oil, stir in the color mass and mill again. This is the easiest kind of lip rouge to make. The quantity of color required averages about six per cent. Color combinations are supplied by the firms which advertise regularly in THE DRUG AND COSMETIC INDUSTRY.

LIP ROUGE—Emulsified Type

White Wax	14 %
Spermaceti	17 %
Petrolatum	25 %
Sesame Oil	14 %
Benzoated Lard	14 %
Lanolin	3 %
Borax	1 %
Water	6 %
Color	5½%
Para Oxybenzoin Acid Ester	½%
Perfume to Suit	
	100 %

Procedure: Mill the color and the preservative in the petrolatum. Dissolve the borax in hot water. Melt the waxes, fats and oils and stir in the borax solution. Stir into the color base, add the perfume and fill at once.

LIP ROUGE—Permanent Type

White Wax	16 %
Ozokerite	10 %
Cocoa Butter	15 %
Olive Oil	18 %
Absorption Base	5 %
Petrolatum	20 %
Water	5 %
Bromo Acid	2.5%
Color	7.5%
Para-Oxybenzoic Acid Ester	.5%
Perfume Approximately	.5%
	100 %

Procedure: To the petrolatum add the bromo acid, the color and the preservative; mill thoroughly. Melt the waxes, fats and oils, add the water (hot) and then stir into it the color base. Add the perfume and fill at once.

The foregoing type formulas illustrate the general composition and manufacturing procedure. In a certain sense the compounding of a lip rouge of any kind is a trial and error procedure. Experimentation is made easier if it be borne in mind that rouges perform only a mechanical function; *i. e.*, the application of color to face and lips. Hence, the desideratum is to make the rouge so that it will not discolor on the face or in the pat and, in particular, so that it can be applied smoothly and evenly without crumbs or blotchiness. Any mixture of any combination of waxes, fats and oils that will give these results is a good combination.

Probably the most important single element is the selection of the proper coloring matter. Heretofore, a number of vegetable colors were employed, but the consensus of opinion seems to be that they are likely to give variable results. This is obvious of course and it is particularly so when it is remembered that colors are affected by the surface upon which they are laid. The skin is not like a board or any other uniform and unchangeable substance, it is variable. As a rule the color in the rouge must remain unchanged in spite of moisture and the acid secretions of the skin. Besides which, there are a number of other purely physical factors that vary from person to person such as dryness, oiliness.

There are of course certain types of rouge which are orange in color and which change to pink on the skin owing to the presence of eosin, which becomes pink in contact with moisture. The use of such a method is important only because of good sales psychology which causes the user to think that, like a chamelon, the rouge is changing to suit her individual coloring. As a matter of fact the rouge best suited for each woman depends upon her blood color in combination with skin pigmentation and not her skin pigmentation alone.

Eyeshadow is not yet as popular in this country as it is in France and in Spain although the past two years have seen a steady growth in this business. Like rouge they have the mechanical function of carrying color for application to the naturally shaded area below the eyes and on the eyelids.

The primary requisite of eyeshadow is that it shall spread easily. The reason for this is apparent in the fact eyeshadow must be applied to the small area around the eyes with extreme care if the resulting paint job is to look artistic, hence it is especially desirable that the color spread easily and this calls for ingredients possessing slip.

Eyeshadows are made in the same general manner as rouges with emphasis on milling. As a rule they contain more petrolatum to enhance the slip or lubricating qualities. It will be seen that eyeshadow consists primarily of petrolatum and color with enough wax to give it form and sheen.

EYESHADOW

Base:

Petrolatum	75%
Lanolin	8%
Beeswax	5%
Ozokerite	12%
	100%

Procedure: Melt and Mix. When making specific colors use about 50% of the base and 50% of the coloring matter. Mix the two and mill thoroughly. The customary shades are blue, brown, green and purple.

NEW PLASTIC JARS

Beetleware Corp., New York, announces that "Beetleware" is available in cream jars. Its advantages over opal jars are in its color-variety, novelty, beauty, lower breakage and savings in shipping weight. The two-ounce "Beetleware" jar shown

weighs but 12 pounds per gross, packed for shipment as compared with opal jars weighing 55 pounds per gross.

When saving of 43 pounds is multiplied by unit shipping cost, and when saving on incoming freight, lighter and cheaper packing, and reduced breakage and spoilage is added, the initial cost is greatly reduced. Jars can be obtained in twelve pastel shades with contrasting double-shell metal caps.

Distribution's Part in the Depression

By Carl Fast

Distribution's high cost must be considered from the angle that every manufacturer must not only pay for distribution costs of the products he buys, but must also pay his employees on a scale of wages which must allow them to pay the distribution costs on the items they need to live and enjoy themselves.

IN ALL our "reconstruction" talk and among all of our measures to relieve, fight, curb, cure or "end" the depression one hears nothing about what is demonstrably its chief cause, Distribution's insatiable demands, the mounting costs of selling goods, which long ago reached the point where Distribution was devouring itself and Production too.

To clearly explain this chaotic situation requires that we accept certain well-known facts as conditions prevailing in our trade and industry.

First; all Producers of goods are now Consumers and as such must buy their needs from Distributors and must pay Consumer Price for them.

Next; All Producers must sell their Product to Distributors for Production Price, which is considerably less than Consumer Price.

That all Distributors are likewise Consumers, who must buy their needs at Consumer Price, which includes the margin necessary to pay for distributive service.

This makes it clear that Production is paying the cost of Distribution on both its own needs and on the needs of Distribution, since the more Consumer Price is absorbed by distributive cost in supplying both parties' needs, the less Production can receive of it.

Thus, assuming Distribution's cost to become as much as 50% of Consumer Price, the account of Production, in disposing of the average consumer-dollar, is:

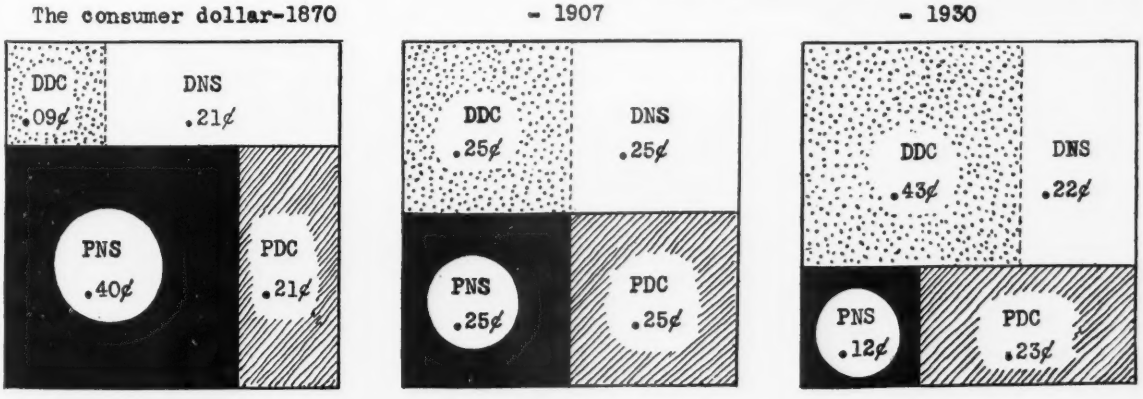
Received, as share in original division		50c
Paid, as distributive cost for needs, 50% or	25c	
Paid, as distributive cost for Distribution's needs	25c	50c
Production's net balance,		0c

The account of Distribution would be:

Received as share in original division,	50c
Paid as distributive cost on its own needs,	25c
Distribution's net balance	25c

This completed cycle of costs, from Producer to Consumer, and then the disposal of Consumer Price by and among the parties receiving it, Production and Distribution, is the only measureable movement of cause and effect. No array of exceptions, in certain individual cases, trades or industries, can nullify the law of doubled distributive cost. It is either true or it is not, but if true it has immense significance. Let us formulate it more clearly, because Production's very existence requires that Distribution's cost be reduced at once and minimized from now on, if this law be true.

The unproductive cost of Distribution to all parties, in a general, continuous exchange of products, *is a*



DDC– Distribution's Cost for Distribution on its own needs.
DNS– Distribution's net share.
PNS– Production's net share.
PDC– Production's Distribution cost on its own needs.

E. W. Rose Co., Cleveland, is offering a new preparation for feminine hygiene, "Zemo-Du," packaged as shown above. Courtesy Owens-Illinois Glass Co.

Kathleen Mary Quinlan has repackaged the strawberry cream mask in a new black jar with gold and black label shown below.

Above is shown Coty's recently-introduced hair lotion. It is designed for use after shampoo to perfume and beautify the hair and is priced at 50 cents the flacon.

Primrose House is featuring a new traveling case (below) fitted with cosmetics and with room for other toilet accessories needed for the week-end.

MORE AND MORE
THEY SPECIFY T.L. BEESWAX

"The Standard of Quality for over Eighty Years"

THEODOR LEONHARD WAX CO., INC.
HALEDON, PATERSON, N. J.
WESTERN DISTRIBUTOR: A.C. DRURY & CO., 106 E. AUSTIN AVE, CHICAGO

doubled cost in its nature. Distribution costs itself as much as it costs Production, since both Producers and Distributors are Consumers, who must pay the total price for Product, including Distribution's cost.

Then, in any single disposal of an amount of Product, if Distribution's cost or share reaches 50% of the Product or its exchange-value in other products, the entire Product or value in products must be consumed eventually, by Distribution's cost in the subsequent exchanges.

If this is so our whole economic procedure, our trade, industry and monetary system, is a hopeless muddle, because the cost of Distribution has now grown to exceed one-half of the Consumer Price. Figures of the Department of Commerce prove this.

Further, Distribution itself is menaced by its own increased cost. As its cost or share of Product rises above 50% its net share diminishes. The more it takes above one-half the less it will have left, after paying its own cost to itself. Without taking space for a complete table of results at various percentages of distribution cost, a few specific calculations or demonstrations on typical exchanges are important. In 1870, as clearly as can be learned from reliable data, distribution absorbed only about 30 cents of the average consumer-dollar. Production, out of its 70 cents, paid 30% distribution cost for its needs, (21 cents) plus 30% distributive cost (9 cents) on Distribution's needs, leaving it a net balance of 40 cents for its product, or that amount in other product in exchange for its own. Distribution, out of its 30 cents share, paid 30% or 9 cents as distributive cost on its needs, leaving it 21 cents net balance.

Distribution's percentage of cost rose steadily as the years passed, for Production was able to get along on less and less of the consumer-dollar through great labor-saving economies and mass-production. The time came when Distribution cost 38% of the dollar, leaving Production 62%. This brought an almost equal net share to each, Production having 24 cents left and Distribution holding 23.56 cents. There is no way of learning the date of this ideal status, but we may be sure that it was a period, however brief, of economic tranquility. By 1930 Department of Commerce findings showed 55 cents of the dollar paid selling-costs only, production costing only 31 cents. With profits to all and transportation cost, we can safely say that Distribution had grown to cost 60 cents of the average consumer-dollar.

This meant that Distribution, actually costing $1.20, had left Production 20 cents less than nothing of the 1870 dollar. Actually, inflated Price had enormously thinned out the Product or Product Value, to all parties. But Distribution's net share, after paying its own cost on its needs, was only 24 cents, little better than in 1870.

Distribution's mounting cost has wrecked Production, compelled immense price-inflation, curbed consumption, created wide unemployment in Production's ranks as well as its own and left us a shattered nation, not knowing what struck us.

Fetchers and Carriers; Sellers and Spellbinders

The golden period when Production and Distribution netted an equal share of the consumer-dollar was probably somewhere in the '80's. At that time the department store, chain-store and mail-order house were infants. If you were city folk you carried a basket to the public market Tuesdays and Saturdays and bought your perishable foods from farmers, butchers, poultrymen, and if not too far inland, the fish-men who rented stalls there. For dry groceries you walked three or four blocks to your neighborhood grocer and carried home your purchases. If you had a charge-account he furnished you a little blank-book with your name on its front cover, much like your bank's pass-book of today. He would write in this such items as you bought and at the month's end you brought the book to the store and he would add up all the items purchased since your last entry of payment. Then you paid him in cash, for bank-checks were only used by good-sized business houses or very wealthy folk.

Such goods as flour, sugar, mackerel or potatoes you bought by the barrel and provided space in your cellar, pantry or attic for storing them. There you hung whole hams, sides of bacon, smoked tongue and kept jugs of sauces, many jars of preserves, spices and other staple needs.

If you lived in the country the butcher or fish-man drove up your lane two or three days a week in a wagon with a scales hanging at its rear-end, whereupon you came out of the house and shopped with him, paying cash or having your purchases charged in the little pass-book he provided.

If you were "women-folks" you planned a new dress and its material for weeks ahead, made sure you had the best dressmaker you could afford and culled from many patterns that which you were sure would be most becoming to you. Having a hat made up to suit your face, your style, your dress, was almost as careful and important a matter. In those days you spent money carefully and slowly and made sure you were getting your money's worth.

Now all is changed. Every minute, on every hand, is the urge to spend quickly, carelessly and often, to buy things because they seem cheap, not because they are of good, durable quality or because you really need them. In those days our mothers taught us that "nothing is cheap that you don't need or that don't give service." Now we can hardly walk fifty steps without coming to a store; we 'phone our food order and it is delivered in an hour or "right away." At any department-store we get free delivery of a spool of thread or a paper of pins, even if we live ten miles away, in fact, have it sent c. o. d. We can carry a charge-account involving costly bookkeeping and billing of purchases amounting to two or three dollars a

(*Continued on page 470*)

Improve—

COLD CREAMS
SUNBURN CREAMS
VANISHING CREAMS
TISSUE AND HORMONE CREAMS

YOUR PRODUCTS

AGAR & VEGETABLE OIL EMULSIONS
HAIR WAVING PREPARATIONS
FEMININE ANTISEPTICS
EYE WASHES
OINTMENTS

PRESERVATIVES

NIPAGIN M, NIPASOL M, and NIPABENZYL, chemically pure esters of p-hydroxybenzoic acid. Phenol coefficients: 3, 17, and 109. Neutral and non-irritating.

Recommended for their high efficiency in agar emulsions, gum solutions, eye washes, hair waving preparations, vaginal douches, vegetable oil emulsions, skin creams, and in any products which require an antiseptic or preservative.

Manufactured by the Julius Penner A.-G., Berlin-Schoeneberg, Germany.

PROTEGIN

An absolutely odorless lanolin derivative. More than just an absorption base. It is offered in two grades:

PROTEGIN for HORMONE and TISSUE CREAMS having an unusually high water content and absorbability.

PROTEGIN X for COLD and CLEANSING CREAMS having a high oil and fat content.

TEGIN

The GLYCERIN ESTER of MONOSTEARIC ACID. A natural fat which does away with harmful alkaline creams. The simplest way to make beautiful VANISHING CREAMS that *are* stable.

TEGIN is ideal for STABILIZING STEARIC ACID CREAMS without changing the outer appearance of the creams.

TH. GOLDSCHMIDT CORP.

70 Pine Street BOwling Green 9-6335 New York City

Management Forum

By Francis Chilson
Production Engineer

New and Unusual

This month we have been particularly lucky in discovering new ways of doing old things. For instance we ran across a high speed hand capper. Heretofore, if a manufacturer did not have a run of production large enough to warrant the installation of a large semi-automatic capper or a fully automatic one, he was out of luck insofar as speed and uniformity of capping are concerned. He was forced to rely on hand methods, which are slow and totally lacking in uniformity, or else he used a small hand capper, which though it eliminated lack of uniformity, it did not materially increase capping speed above hand output.

This same condition applies as well to every large manufacturer in the trade. Every one of them with a varied line has to contend with hand capping because of the number of small output items, which would not pay to make a set up of regular semi or automatic equipment. Nor would it indeed, pay him to purchase capping accessories for these small run items.

Complicating the condition still further is the tendency toward odd, shaped though highly decorative plastic caps. Many firms use pyramidal shapes, some use pronounced conical caps (Peggy Sage if we remember correctly caps her bottles with miniature dunce caps), some (Non Spi) employ oval caps, dropper caps, etc., etc. These odd shapes are difficult if not impossible to cap on standard machinery and many of them are so fragile as to preclude speedy handling. And these odd shapes make the operators' fingers sore.

You can now get at a very low price, low enough for even the tiny manufacturer, a flexible capping machine which will apply caps of any material and any shape or size, on a conveyor or in trays, at very high speeds. The caps must be laid on the bottles or jars; the machine screws them down *tight!*

Although chucks must be obtained for every size and style of caps, these chucks are inexpensive, extremely so. The machine may be adjusted in the time that it takes to twist a thumb screw to handle all sizes from the smallest standard cap up to four inches. All that need be done is change the chuck and adjust the clutch. The change over requires less than a minute.

And the machine can possibly be used as a mixer for liquids, creams and pastes.

In short, you have in this inexpensive but high speed piece of equipment a dual purpose machine of the highest utility.

We'll be glad to tell you who makes it if you will drop a line to The Drug and Cosmetic Industry. This is a good bet.

More New Things

In peringrinating around the trade we chanced upon an internationally known manufacturer whose fame rests upon one piece of equipment. Imagine our surprise when we unearthed also:—

An unusually efficient labeling machine. Semi automatic in operation, it functions by pressing the container on the label, which is brought into position already pasted by means of a rotary head.

A bottle washer that will handle any shape of bottle automatically at speeds ranging from 750 to 1,600 per hour.

A low pressure boiler ideally suited for cosmetic and drug plants without a central steam supply.

A portable hand pump suitable for filling creams and other preparations in small batches. And a number larger sized pumps of varying capacities also.

A corking machine operated by hand.

An extraordinary line of filters of all sizes from small laboratory filters to immense plant filters. Disc, gravity, ceramic, pressure. In this group may be found a filter for every purpose and for every pocketbook.

Back of this line is a name of many years standing and excellent reputation. Many of these units have already been sold in this trade.

The name of this manufacturer will be supplied on request.

Announcing

The new clipless closure automatic tube filler by F. J. Stokes. It is said that this machine does not require an extra length tube and that it effects a perfect seal. It is known as No. 90 D and will fill 45 to 50 tubes per minute 1½ x 7 inches long. It is further announced that this same closure will be made available in all semi automatic and hand models. (Stokes also sent us a copy of a bulletin describing their new automatic, one gallon water still, which was described a short time ago in this department.)

A bulletin from Ertle Engineering Company tells us that the standardized line of the company consists of hand operated vacuum fillers, disc filters, portable mixers, pumps and glass lined or Allegheny metal tanks. This equipment comes in a variety of sizes and Mr. Ertle in a personal letter to the writer announces that he intends to add a six stem foot operated filling machine to his already varied line.

Good news from Pfaudler informs us that:—"Recongizing that there are certain conditions and designs where resistant metals are preferable, we have kept pace with the development of these new alloys as a supplement to our standard lines.

We are particularly well equipped to supply welded alloy equipment, partly because of long experience, and partly because we are able, by means of our large enameling furnaces, to heat-treat at high temperatures after fabrication.

In the case of stainless steel, annealing of the welds is generally recognized as essential where corrosive solutions are to be handled, and our factory is one of the few which is suitably equipped for this operation."

The October issue of *Packomatic*, that sprightly bulletin of the J. L. Ferguson Company drifted in today as nonchalantly as Bald Headed Bowley holding up a purchasing agent for an order for a powder filler. Bowley, the star salesmanager of J. L. F. will some day walk into your office, hang his hat on the end of his cigar and sign you up for five powder fillers. Mark my word on it! In order to protect you against his irresistible approach I shall describe his appearance to you. He resembles, God help him, a cross between Bowley, Bob Fitzsimmons, Greta Garbo, and me. In the current issue of his opus (which always causes me to wonder how it got through the mails), Bowley tells us all about how Max Factor fills powder with one of his Bond fillers. You don't know much about J. L. F. simply because he has never advertised in The Drug and Cosmetic Industry. How could you? But we're holding him down to twelve pages and you'll hear a lot about him and his machines in the future. We will take his advertising but we'll be d——d if we'll take his picture.

Why Not?

Use pearl essence in tooth paste. Pearl essence is used to give lustre to lacquers and nail polishes. It seems to us that it would impart a similar lustre to teeth. Pearly teeth, what?

(*Continued on page 487*)

What to sell to the not-buying public

Perhaps sales have fallen off. But was it any improvement to get out a cheap product at a cheap price?

Not at all.

What's happened in many cases is that a new face appeared with a *good* quality line at a reasonable price, and the new face is now wreathed in contented smiles. The not-buying public bought.

It proves that they can still be sold.

Cheapening seldom pays; quality generally does.

Better talc, better wax, better bottles, better packages, better odors, better sales—that means better days.

Bear it in mind. Put it into practice. *Call us in for suggestions.*

van Ameringen-Haebler, Inc.

Manufacturers and Importers of

Aromatic Essentials

{ *Flavor Materials, Aromatic Chemicals*
Essential Oils, Perfume Specialties }

315 FOURTH AVENUE, NEW YORK

180 North Wacker Drive, Chicago 438 W. 48th St., Los Angeles 42 Wellington Street, E., Toronto

Factory, Elizabeth, N. J.

The Compounders' Corner

Sodium Cholate and Laurylsulphonate in Cosmetics

Sodium cholate is a brownish, bitter-tasting, comparatively faintly odorous product obtained from cholic acid. It is easily soluble in proportion of 100 parts in 150 parts of warm water. Sodium laurylsulfonate is a new emulsifying agent and preservative, obtained as white, odorless and almost tasteless powder. It is made from lauryl alcohol, which is obtained from coconut oil. Alcohol is sulfonated and sodium salt of sulfonated product is formed in usual manner.

Both these products have assumed new interest in cosmetics. They have capacity for stabilizing oxygenated compounds, such as sodium perborate, sodium percarbonate and hydrogen peroxide. Addition of small amount of these products, preferably sodium laurylsulfonate since sodium cholate has bad taste, gives an oxygenated dentifrice of marked effectiveness.

Sodium cholate is available in form of white or brown powder. A very small proportion, only 0.1%, will produce desired result. Sodium cholate in shampoos and shaving creams softens action of soap on skin. In hair washes and lotions, containing lecithin and cholesterin, it increases solubility of latter substances. Its use is indicated wherever oxgall is used and it has advantage over oxgall of being purer. In skin and face creams it aids penetration and prevents creams from becoming granular. Sodium cholate in bath salts increases effectiveness of product by allowing evolution of carbon dioxide or oxygen in smaller bubbles. About 3% is sufficient.

Medicine in Cosmetics

The main trouble with paraphenylenediamine as a hair dye is not the chemical itself but a product formed by natural oxidation of paraphenylenediamine on hair. This product is highly poisonous and is known as quinonediamine. To avoid this trouble, new products have been developed which do not decompose or oxidize to give poisonous substances. Paraphenylenediamine and the like are detoxicated with sulfur. These products are harmless in every way but have disadvantage of dyeing hair more slowly. Another development is oxidation of paraphenylenediamine to insoluble dyestuffs which are used in required dilution to give proper color. The preparation is applied to hair and then oxidized by means of oxygen or air. Great advantage of this product over paraphenylenediamine and other poisonous amines is that former does not come in contact with hair but only the reduced solution of harmless dyestuff is used. Hair dyes have also been improved by addition of reducing salts in proper quantity so that poisonous amine bases are detoxicated. Their irritating action on skin is claimed thus to be avoided.

Pyrogallic acid has been used in hair dyes. This substance is claimed to be harmful to skin and to human system at large due to resportion into blood. It is said to cause injury to nervous system, to affect blood and kidneys. Interesting point is not just how true these statements are or how many people are affected by pyrogallic acid due to idiocyncrasy, but that trouble can be prevented by treating pyrogallic acid with sulfur. This detoxicates the acid.

Henna is usually regarded as perfectly safe for treating hair. Nevertheless there have been cases where skin irritations and like have been traced to use of henna. Henna itself is never to blame but it has been found that henna may contain impurities occurring naturally or purposely added by pickers of leaves.

New Shampoo Base

Theory is advanced that ordinary soap, in hydrolyzing and liberating alkali, injures hair through combination of alkali with keratin of hair. Experiments have proven that only shampoo that should be used is one that gives solution with pH of 4 to 8. This range covers moderately acid, neutral and very slightly alkaline field. Hence use of soap, soda, potash, borax, ammonia and ammonium carbonate in hair shampoos would be excluded. New washing agent and shampoo base has been made in form of very strongly lathering, almost colorless material by synthetic process. Water solution of this washing agent has pH of 4.5 to 6.5. It is made from derivatives of high molecular weight fatty acids which contain polar hydrolyxl groups. These substances are ordinarily insoluble in water, but are rendered soluble by introduction of solubilizing groups connected to oxygen atom or direct to carbon. These products were found to have disadvantages of causing deposits at about 20° C. while in bottle. By combination with corresponding aromatic compounds, strongly concentrated, liquid preparations of lemon-yellow color have been obtained. Liquid remains clear for indefinite periods at 8° to 10° C. These products have detergent qualities of best grade of soap and are not sensitive to action of hardness salts in water.

Castor Oil in Cosmetics

Castor oil has been used in cosmetics for many years. Recently, red oil (oleic acid) has disputed its field. A particular advantage of castor oil is its solubility in alcohol. Other fatty oils and mineral oil as well are insoluble and therefore not so well suited for hair oils, brilliantines and like. The castor oil cosmetic of this type does not have to be shaken before use as do others. Another advantage is the viscosity of castor oil. For this reason it is often added to mineral oil hair preparations to increase viscosity. However, castor oil does not mix well with mineral oil and can be added only in small quantity. Castor oil is also a softening agent, and is added only in small proportions to nail polishes. Castor oil is an ingredient of pomades, creams and other cosmetics compounded with fatty oils.

Sulfonated castor oil, known as turkey red oil, is an interesting product in cosmetics. However, the products sold are castor oils sulfonated to different degrees. Sulfonated castor oil is used in permanent wave preparations. It may be mentioned that aqueous solutions of certain salts or vegetable slimes are not effective permanent hair wave preparations. A sulfonated castor oil wave oil contains 44% water, and 49% total fat consisting of sulfonated castor oil with an acid number of 50. Castor oil is present in form of sodium soap. Acid number of castor oil, figured on dry basis should be about 113.

Sulfonated castor oil is used in tooth pastes where most important function is dissolving film and tartar from teeth. It also has disinfecting action which depends largely on proportion.

Sulfonated castor oil is very effective wetting agent and is used in toilet waters, nail preparations, skin creams, etc.

Hair Pomades

Pomades for hair are of various composition. Most interesting of these contain pectin. Three ways of using pectin in hair pomades are as follows:—96% water, 3% glycerin and 1% pectin; 98.5% water, 1% pectin and ½% citric acid; 96% water, 2% glycol borate, 0.25% pectin and 1.75% ethyl alcohol. These preparations do not require any preservative. When gum tragacanth is used as principal ingredient, a preservative, such as esters of parahydroxybenzoic acid, should be employed. Preparations are also made containing salicylic acid. Thus in one formula 175 parts of gum tragacanth powder are triturated with

A Flower Monogram

Easter Lily D is a faithful duplication of the fragrance characteristic of the Easter Lily. A delightful floweriness especially appealing to the conservative, blonde-type, distinguishes this complex which is admirably suited to individual use or for blending with Rose, Jasmin or Lilac compounds. A sample will convince you of the merits of Easter Lily D. $12.00 per pound

RESEARCH

We have maintained for many years an extensive research laboratory devoted to the improvement of established items as well as to experimentation on new products. Years of experience in this field have furnished not only a wide background but a modern viewpoint, always enabling us to keep pace with the times.

We desire to supply your requirements of the finest basic perfume materials or compounds but more especially wish to share with you our knowledge of products and the odors best suited to their individualities.

Prompt, courteous attention will be accorded your confidential inquiries.

COMPAGNIE PARENTO, Inc.

EXECUTIVE OFFICES AND LABORATORIES

CROTON-ON-HUDSON, N. Y.

NEW YORK
507 FIFTH AVENUE

CHICAGO
5748 N. CAMPBELL AVENUE

solution of 7 parts of pure salicylic acid in 268 parts of ethyl alcohol and then worked into finished product by addition of 50 parts of water-soluble perfume and 4500 parts of distilled water. In making this preparation salicylic acid used must be absolutely chemically pure. Otherwise impurities in acid will quickly cause preparation to become red in color. Consistency of such hair oil is easily controlled by addition of proper proportion of gum tragacanth. Latter may also be used in admixture with quince slime or mucilage. In such case 100 parts of gum tragacanth are mixed with 1000 parts of quince slime and 10 parts of water-soluble perfume are added. Agar-agar may be used for same purpose in combination with white gelatin and glycerin. In this case a preservative, such as sodium benzoate or ethyl parahydroxybenzoate must be added. When coal tar colors are used for dyeing the preparation, great care must be taken in selecting only those colors that are absolutely non-poisonous. The colors must also be soluble in water.

Acids in Cosmetics

Acids are important in cosmetics. They must be used with great care for even weak acids have strong action on tender membranes. Strong mineral acids have but little use. Thus hydrochloric acid is mostly used for removing tatoo marks, and nitric acid and chloroacetic acid for removing warts. Most powerful of chloroacetic acids for this purpose is not trichloroacetic acid, which is mostly used but monochloroacetic acid. Latter is used in 1 to 2 dilution. Cheaper product is commercial acid which is mixture of mono-, di- and tri-varieties.

Salicylic acid has important action on skin. It dissolves horny layer of skin painlessly. This is best manifested when acid is incorporated with impenetrable substances in form of plasters, collodion or salves. When acid is used in ether or alcoholic solution, action is still painless but acid reaches healthy skin and acts on it. Complaints that have arisen from use of salicylic acid are due mostly to fact that these preparations have not been properly used and been allowed to come in contact with healthy skin.

When salicylic acid is used for removing corns, it is advisedly mixed with lactic acid or acetic acid. Thus preparation may contain 10 parts of salicylic acid, 10 parts of lactic acid, 60 parts of 4% collodion and 20 parts of solution of ether in alcohol. Addition of 1% of extract of cannabis indica aids in preventing salicylic acid from acting on healthy skin.

Acetic acid possesses antiseptic powers. Its addition to hair tonics and toilet waters, particularly for use after shaving, has been highly recommended. In latter case attention is called to action in neutralizing alkali on skin due to hydrolysis of soap. If acetic acid is complained of due to its odor, it may be replaced by formic acid or lactic acid.

Thymol in Mouth Washes

It is common practice to use thymol in mouth washes. Thymol is a pleasant tasting substance and is a good mouth disinfectant. It is also used with good effect in tooth pastes. Nevertheless, experiments and clinical observations have shown that not everybody can stand the action of thymol. It will produce headaches under certain conditions and also disturbances of the thyroid gland which is a more serious matter. These reports should, however, not be inperpreted as forbidding the use of thymol for mouth washes and tooth pastes. It is here again a question of hypersensitivity and personal idiocyncrasy. The principal point is that manufacturers of tooth pastes and mouth washes that use thymol in compounding should have knowledge of its possible harmful action on supersensitive persons and should treat complaints as rare exceptions to the general utility and beneficial action of thymol containing dentifrices.

Mouth Wash With Low Alcohol Content

It is a great temptation to dilute alcohol used for mouth washes with water so as to reduce cost. This generally leads to difficulties for essential oils or aromatic chemicals, used will then not dissolve properly. This refers to peppermint oil, oil of wintergreen, menthol and like. However a clear solution can be obtained in mouth wash containing only 30% alcohol, if 5 to 10% of potash soap made from olive oil, coconut oil or castor oil, is first dissolved in alcohol. Larger quantities of soap must be used if amount of aromatic substance is large. a very useful solvent in mouth washes is riethyleneglycol-monoethyl ester, but this increases cost considerably.

Removing Freckles

Most effective agent is unfortunately most dangerous and should never be used. This is mercury salts. Preparations containing hydrogen peroxide or other oxygenated compounds, such as sodium perborate and like, are effective to degree only. Bismuth salts give good results, but compounder must be sure to purchase salts that do not contain lead. Quinine and aesculin have been recommended.

Perfumed Bath Salts

Soda, rock salt and sodium thiosulfate have been used in finely crystallized form. Sodium thiosulfate is not particularly good for it will eventually destroy many fine bouquets and same result will be reached with soda. Only safe base is rock salt. Numerous bouquets are used for perfuming salts, giving lavender, pine-needle, lilac, rose, eau de cologne, violet, lemon and other effects. Bouquet is carefully sprayed on salt so that good mixture is obtained. Borax and sodium phosphate have been used in coarsely crystalline products. Action of chemical on perfume must be carefully watched by compounder.

Limonal in Eau De Cologne

Reduction of cost of eau de cologne is counteracted by fact that essential oils used are not soluble in dilute alcohol. Hence water cannot be used as partial substitute for alcohol. Terpeneless oils have been tried but eau de cologne has flat odor, and its invigorating, freshening effect is lost. Addition of menthol, vinegar and other substances are not successful. However, the aromatic chemical, limonal, can be effectively used to give an eau de cologne, containing only comparatively little alcohol but possessing fresh and nerve-stilling odor. Limonal may also be used in hair washes and toilet sprays, as it is soluble in 30% alcohol.

Salol Troubles

Use of salol, (phenylsalicylate) in tooth pastes and mouth-washes is not considered absolutely unobjectionable as there are cases where this chemical has caused mouth and gum irritation. Attention is also called to the strict avoidance of potassium chloride as it is a blood poison. Objection has been raised to thymol to which many people are sensitive. It has been said to cause headaches and disturbances of thyroid gland.

Be Careful

Dermatologists warn against too high concentration of quinine in hair washes as this will cause diminution and damage to chemical activity of cells in scalp. Chromic acid in deodorants is not advisable due to absorption into blood stream and action on urinary system. When chloral hydrate is used in hair washes, concentration should be small. When present in large concentration, it irritates skin. Use of lead dichromate eyebrow and eyelach cosmetics is decried. It is far safer to use lampblack, burnt sienna or burnt umber. Alkaline arsenates in hair tonics is considered bad practice.

New Salve Base

This base may be used for making salves, pomades and the like. Lanolin or spermaceti is mixed with softening agent, for example spermaceti oil. One or more substances are added such as fats from sweat glands, beeswax, palm oil and the like. Carl Cronquist, Sweden. French Patent No. 721,512, filed March 4, 1932.

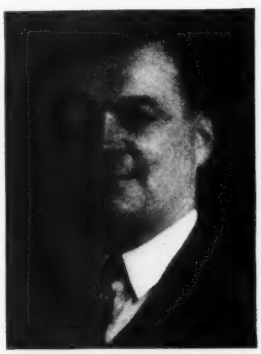
News

Associations

Gogarty to Head Salesmen

B. J. Gogarty, Rossville Commercial Alcohol Corp., was nominated for president of the Salesmen's Association of the American Chemical Industry at a meeting of the Nominating Committee held at the Chemists' Club, New York, November 15.

Louis Neuberg, Warner Chemical Co. was nominated for First Vice-president; W. I. Galliher, Columbia Alkali Co., Second Vice-president; L. E. Swenson, American Cyanamid Co., Third Vice-president; Frank E. Byrne, Monsanto Chemical Works, Secretary-treasurer. For members of the Executive Committee,



B. J. Gogarty

William D. Barry, Mallinckrodt Chemical Works, and Gustave Bayer, Merck & Co., were nominated for three year terms; Alexander Leith, Jr., Dow Chemical Co., was nominated for the two year vacancy caused by advancing Mr. Gogarty to the presidency; and John M. Alvarez, Grasselli Chemical Co., was nominated for the one year vacancy caused by advancing Mr. Swenson to Third Vice-president.

Insecticide Makers to Meet

The nineteenth annual meeting of the National Association of Insecticide & Disinfectant Manufacturers will be held at the Hotel New Yorker, New York, December 12 and 13, according to an announcement by Evans E. A. Stone of William Peterman, Inc., president. General convention arrangements are in charge of Harry W. Cole of Baird & McGuire, Inc., Holbrook, Mass., secretary. The program committee is headed by Walter J. Andree Sinclair Refining Co., and the entertainment committee by Grant A. Dorland, MacNair-Dorland Co.

Among the speakers are Lee Bristol, Bristol-Myers Co., New York; Dr. Alfred Weed, John Powell & Co., New York; and Dr. Emil Klarmann, Lehn & Fink, Inc., Bloomfield, N. J.

A. P. M. A. Meeting

American Pharmaceutical Manufacturers' Association held its semi-annual meeting in Detroit, October 26 to 28. At that time the report of the committee on returned goods was discussed and the following plan adopted:

1. No opened packages to be accepted for credit. 2. Stocks damaged by fire, smoke, or water to be received only on basis of salvage value, with reminder to enter claim with insurance company. 3. No returned goods received during December. 4. All members to send to secretary a statement of the percentage of sales in returned goods only. 5. Stocks from estates of physicians to be received only on basis of salvage value.

The research board presented an interesting study of the efficacy of enteric coatings for pills and tablets, designed to protect the medicament in the stomach and dissolve in the intestines. Several types of enteric coatings had been studied by following the progress of the enteric-coated tablets through the alimentary system by means of X-ray pictures. Many types of coatings commonly used were thus proved to be of little value.

Chicago was selected as the place for the next annual meeting. It will be held in the Edgewater Beach Hotel, probably June 21 to 23.

Assoc. Drug Chain Convention

Associated Chain Drug Stores plans to hold its February meeting as a sea-going convention on the Cunard liner "Franconia," sailing from New York, January 28, the trip to cover a ten-day schedule, with three days and three nights in Havana. Reservations may be made through L. E. Deeter, executive secretary, at 245 Fifth Ave., New York.

Chemical Exposition Postponed

The Fourteenth Exposition of Chemical Industries will be held at the Grand Central Palace, New York, during the week of December-4-9, 1933, instead of earlier in the year as originally proposed.

S. O. C. M. A. Moves

Synthetic Organic Chemical Manufacturers' Association has announced its removal to 260 West Broadway, New York.

Dunn on Price Discrimination

On November 3rd Charles Wesley Dunn, General Counsel of Associated Grocery Manufacturers of America, delivered an address before the association upon the federal anti-price discrimination law contained in section two of the Clayton Act. This section prohibits price discrimination in interstate commerce between purchasers, which may be effective to substantially lessen competition or tend to create a monopoly in any line of such commerce, subject to certain exceptions. In his address Mr. Dunn recommended that the section be amended to apply also to buyers who induce or compel the price discrimination prohibited by it. At the conclusion of his address the association unanimously adopted a resolution approving this amendment and directing its legislative committee to secure the introduction of a bill into Congress, at its next session, to effect the amendment.

People

I. L. Lyons, Jr. Elected President

I. L. Lyons, Jr., formerly vice-president, has been elected president of I. L. Lyons & Co., New Orleans, wholesale druggists, succeeding John W. Phillips, who becomes chairman of the board. Other officers elected were first vice-president, T. H. Lyons; second vice-president, E. B. Briggs; secretary-treasurer, George J. Lyons.

C. S. Davis—Dow Drug Mgr.

Directors of the Dow Drug Co. at a meeting in Cincinnati elected Charles S. Davis general manager of the company. He has been director of sales and merchandising. He takes over the general manager's duties from President D. C. Keller.

Hicks Now V. P. of J. & J.

T. E. Hicks, formerly assistant vice-president, has been elected vice-president in charge of field forces of Jonhson & Johnson, New Brunswick, N. J. He has been associated with the company since 1922.

Ralph Patch Elected

Ralph R. Patch, president, E. L. Patch Co., Boston, has been elected a trustee of the Massachusetts College of Pharmacy.

Brooks Sales Mgr. Houbigant

H. L. Brooks, formerly sales manager, Coty, Inc., has become general sales manager of Houbigant, Inc., New York.

Miss Griffith

Dr. and Mrs. Ivor Griffith of Philadelphia announce the birth, October 24, of an 8 pound baby girl. Dr. Griffith is a member of the faculty of the Philadelphia College of Pharmacy and editor of the "American Journal of Pharmacy."

H. J. Moller—Vivaudou Sales Mgr.

Henry J. Moller has been elected vice-president and sales manager of V. Vivaudou, Inc., New York.

Bauer & Black Names Sloss

John W. Sloss has been appointed district manager for the Pacific Coast by Bauer & Black, Chicago.

John A. Chew Opens Business

John A. Chew has resigned as vice-president of the Swann Chemical Co. and of the Federal Phosphorus Co. to enter the chemical business under his own name with offices at 60 East 42 st., New York.

Before joining the Swann organization, he had been vice-president of the Warner Chemical Co. from 1917, vice-president of

John A. Chew

Westvaco Chlorine Products, Inc., from 1926, and president of Barium Products, Inc. He went with the Warner company as sales manager in 1917.

He began his chemical trade activities in New York in 1903 as assistant local manager for Rosengarten & Sons, Philadelphia. After the merger of that house in the Powers-Weightman-Rosengarten Co., he continued the connection, remaining with the concern until 1910. From that year until 1917, he was office manager for the Bauer Chemical Co.

Joe Wafer's Selling Method

Joseph Wafer, Industrial Chemical Sales Co.'s Morton Downey, sang several numbers at the banquet of the North Carolina section of the American Water Works Assn. at Winston-Salem, N. C., November 2.

W. A. Kramer—Walgreen Ad. Mgr.

William A. Kramer, Chicago advertising man, has become associated with the Walgreen Co., Chicago, as advertising manager.

Richard Goes With Swann

R. F. Richard, former general manager, General Chemical Co., New York, has become associated with the Swann Corp. as vice-president in charge of sales. He makes his headquarters in the company's New York office.

Louis Hyman, President

Louis Hyman has been elected president of Hyman & Hyman, Inc., cosmetics, New York, succeeding his brother, the late Joseph Hyman. He had been secretary of the company since 1924. Other officers are David H. Kahn, vice-president; Herbert H. Myers, secretary; and David E. Jacobs, assistant secretary.

Wiedman Joins Magnus, Mabee

H. A. Wiedman, well known in the drug and chemical trades in New York for a number of years, has become associated with Magnus, Mabee & Reynard, Inc., that city. His career in the drug, chemical and allied trade field began in 1917, when he joined the staff of McKesson & Robbins, Inc. He was later with E. Fougera & Co., Inc., and from 1928 to the early part of this year, was in charge of the chemical sales of the Schering Corp.

Voorhees Joins Ungerer

Kenneth G. Voorhees, son-in-law of F. H. Ungerer, president, Ungerer & Co., New York, has become associated with the sales department of that organization.

Will de Grouchy With Pepsodent

Will de Grouchy, for 10 years promotion manager of Curtis Publishing Co., has joined Pepsodent Co., Chicago, as promotion manager.

Cal. Fruit Appoints Rhoads

Evan L. Rhoads has been appointed central district manager of the Products Department, California Fruit Growers Exchange, with headquarters in Chicago.

He is a graduate of Philadelphia College of Pharmacy and Science, having majored in that institution in chemistry. He has for the past nine years occupied the posi-

Evan L. Rhoads

tion of chief chemist of American Preserve Co., Philadelphia and during the past year he has been actively engaged in scientific research and sales work for this organization. His scientific and sales background qualify him for the position to which he has been appointed. He will be glad to greet his many friends who may be visiting Chicago during the World's Fair at his headquarters which for the present will be 189 West Madison Street.

Howe Joins Martin

Russell Howe, formerly with R. Hillier's Son Corporation, drug merchant, has become associated with William E. Martin, New York.

A. H. Bergman Robbed

The home of Augustus H. Bergman president, Oxzyn Co., at Great Neck, L. I., was entered and robbed of about $15,000 in jewels on the morning of October 14.

Geo. Briasco Joins Geo. Uhe

George Briasco, formerly with J. H. Rodriguez, New York, has become associated with George Uhe, that city.

Nunan Joins Hillier

Francis Nunan, formerly with J. L. Hopkins & Co., New York, has become city representative for R. Hillier Son Corp., that city.

Pearsall Cleared

At the conclusion of the Government's case as presented by United States Attorney Henry Gerson, in the United States District Court, Southern District of New York, Hamilton F. Pearsall of Brooklyn, one of the defendants, had the indictment against him dismissed by District Judge William Bondy.

The prosecution of Pearsall grew out of the failure of the Euro-American Corp., Newark, N. J., against whom an involuntary petition in bankruptcy was filed on May 21st, 1931. It was charged by the government that some time in March, 1931, the Euro-American Corp. began to buy extensively merchandise of every description to the extent of about $108,000. and disposed of this merchandise, with the aid of bankruptcy racketeers, to cash buyers for from 40 to 60 per cent. below the cost price.

There were indicted in the Federal Court for concealment of assets from the receiver and trustee in bankruptcy, and conspiring to do so, 15 persons, some of whom were officers of the Euro-American Corp. Of the 15 individuals so indicted, 10 pleaded guilty, two have not as yet been apprehended and Jesse Weinberg, Harris B. Reisler and Hamilton F. Pearsall have been on trial before Judge William Bondy.

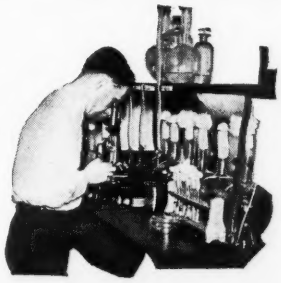
When de dismissed the indictment, which was found against Pearsall and upon which he was on trial today with the two other defendants, Judge Bondy expressed himself strongly in criticism of the officials who procured the indictment of Pearsall and inquired whether Pearsall had spent any time in custody. He was informed by attorney for Pearsall, that fortunately Pearsall was not incarcerated but surrendered himself and arranged for bail promptly upon arraignment.

Eric Coupey, Broker

Eric Coupey, New York, has announced that in order to devote himself exclusively to brokerage, he has discontinued his Paris business, Coupey Fils & Dehais.

• U. S. INDUSTRIAL CHEMICAL CO. INC., A SUBSIDIARY •

• U. S. INDUSTRIAL ALCOHOL CO. • • U. S. INDUSTRIAL CHEMICAL CO. INC., A SUBSIDIARY OF U. S. INDUSTRIAL ALCOHOL CO. •



U. S. I. A.'s
Service to Industry . . .

EMERGENCY SHIPMENTS

WHEN your production schedule is threatened with shortage of a vital raw material—call the U. S. Industrial Alcohol Co. Unexpected new business, increased orders, a clerical error, may tie up your equipment and labor . . . lose orders . . . jeopardize valuable customers.

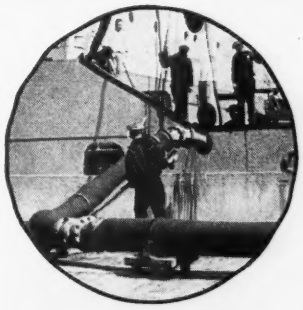
Pick up your telephone. Give your wants to the nearest U. S. I. A. sales office, listed below. Tank car, drum, or can consignments will be put through within a few minutes of receiving your call. Frequently, deliveries may be made in a few hours from strategically located stocks. Production may be quickly resumed without costly shut-downs.

Convenient Stocks

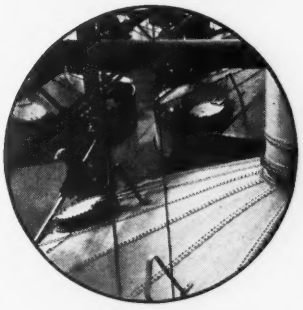
Immediate shipment of the many alcohol formulae and standard solvents can be made from six separate manufacturing plants and twenty-three sales warehouses, located in all important centers of the chemical industry.

Complete satisfaction of your standards of purity and uniformity are assured: The largest technical staff of its kind in the world protects specifications by complete control of raw materials, shipping equipment, sales channels, and the best equipped plants in the industry.

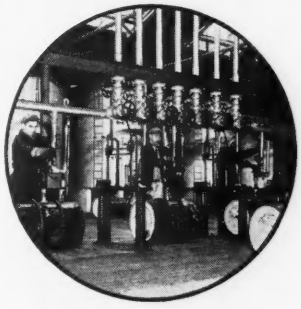
This great organization is at your service. U. S. Industrial Alcohol Co., 60 East 42nd Street, New York, N. Y.



Molasses is pumped from steamers direct to six huge storage tanks.



New design fermenters have capacity of 130,000 gallons of mash each.



Automatic electric filling machines assure accurate, uniform measure.

29 CONVENIENT DISTRIBUTION POINTS

Manufacturing Plants

New Orleans, Newark, Baltimore, Buffalo, Anaheim, Peoria

Branch Sales Offices & Warehouses

Atlanta, Ga.; Baltimore, Md.; Boston, Mass.; Buffalo, N. Y.; Chicago, Ill.; Cincinnati, O.; Cleveland, O.; Dallas, Tex.; Detroit, Mich.; Indianapolis, Ind.; Kansas City, Mo.; Los Angeles, Cal.; Louisville, Ky.; Memphis, Tenn.; New York, N. Y.; New Orleans, La.; Philadelphia, Pa.; Pittsburgh, Pa.; Portland, Ore.; St. Louis, Mo.; St. Paul, Minn.; San Francisco, Cal.; Seattle, Wash.

U. S. INDUSTRIAL ALCOHOL CO.

WORLD'S OLDEST AND LARGEST MANUFACTURER OF INDUSTRIAL ALCOHOL

All standard specially denatured alcohol formulae stocked at all warehouses

Makers of PYRO . . . the Standard Anti-freeze and general utility Denatured Alcohol

U. S. INDUSTRIAL ALCOHOL CO.

• U. S. INDUSTRIAL CHEMICAL CO. INC. •

Companies

Dunning Buys H. W. D. Stock

Hynson, Westcott & Dunning, Inc., Baltimore, has announced that Nathaniel Nicolai has been made a vice-president and director of the company. He joined this organization after extensive service with Parke, Davis & Co., and for the past seventeen years has been eastern sales manager of the Baltimore company. He has charge of the New York and Philadelphia offices, covering a territory extending over half of the United States and Eastern Canada.

Dr. H. A. B. Dunning

In addition to his election as vice-president, Hynson, Westcott & Dunning has made other changes in its official personnel necessitated by the resignation of James W. Westcott, vice-president, and of A. M. Hayes, secretary.

The reorganized official family is as follows:—president, Dr. H. A. B. Dunning; vice-presidents, Nathaniel Nicolai and L. C. Shepherd; secretary-treasurer, Dr. J. H. F. Dunning, son of the president. Dr. H. A. B. Dunning has acquired Mr. Westcott's stock in the company, and now holds 95 per cent., the remainder being in the hands of employees.

Alsop Engineering Representatives

Alsop Engineering Corp., New York, has for the last six months been developing its organization until it now has available trained representatives at 13 strategic points as follows: Baltimore, G. K. Heller, 217 N. Calvert, St.; Boston, E. A. Knowlton, 504 Rice Bldg., 10 High St.; Chicago, Loeb Equipment Supply Co., 618 W. Lake St.; Cincinnati, Williams Sales Co., 1288 Rutledge Ave.; Connecticut, Wm. Engesser, Bethel; Detroit, G. J. Keeler, 2457 Woodward Ave.; Kansas City, James M. Cowie & Co., 2233 Grand Ave.; Los Angeles, J. W. Leser & Co., 1001 E. 1st St.; St. Paul, H. L. Biersach, Pine and E. 3rd St.; Newark, Chas. T. Knorr, 80 Elizabeth Ave.; Philadelphia, T. R. Turner, P. O. Box No. 26, Phoenixville, Pa.; Pittsburgh, J. B. Kent, 607 Benedum Trees Bldg.; San Francisco, Marshall Dill, 510 Montgomery St.

Coty Imitator Convicted

Convicted of selling spurious Coty perfume through his own retail outlets, John Schearer, operator for many years of the Helvetia Knitting Mills, Paterson, N. J., was sentenced on Monday, October 17th, to serve six months in jail. Sentence was suspended.

Perstick Sales Agent

Feminine Products, New York, makers of "Perstik," announces appointment of Kimm-Libbey, Ltd., New York, as sales agents for their product.

Bluekamel Cosmetics

Bluekamel, Inc., Detroit, manufacturer of cosmetics and perfumes has taken out a Michigan charter of incorporation. H. S. Graff is general manager and Henry W. Roth, Vaughan Reid and Fred J. Coulton are the owners.

Mallinckrodt Ether Guarantee

Mallinckrodt Chemical Works, St. Louis, is featuring extensively in medical publications the following guarantee: "Any can of Mallinckrodt ether for anesthesia that fails to pass either the test for peroxide or this very exacting requirement for aldehyde will be replaced free of charge regardless of age, or storage conditions."

A folder has also been issued describing two rapid and highly sensitive tests, more sensitive than those prescribed by the latest pharmacopeia, which every can of Mallinckrodt ether is warranted to meet at the time it is opened.

F. J. Stokes Appoints Agent

The F. J. Stokes Machine Co., Philadelphia, has appointed the J. E. Williams Sales Co., Cincinnati, to act as sales representatives in that territory.

U. S. Bottlers to Sell Direct

U. S. Bottlers Machinery Co., Chicago, announces that A. H. Ross & Co. is no longer its exclusive sales representative and that its sales will now be handled by direct factory representatives.

"The management of the U. S. Bottlers Machinery Co. feels that this type of representation will result in a better service to the customer and a more complete understanding of their equipment, inasmuch as the factory representative will have the knowledge and co-operation of the entire engineering personnel at his disposal, which will enable him to assist plant managers and superintendents in planning their equipment lay-outs."

Standard Alcohol Co.

Standard Alcohol Co. has been formed by the Standard Oil Co. of New Jersey, with capital of 1,000 no par common shares and 10,000 no par preferred shares to take over the manufacture of alcohols from petroleum formerly conducted by the Standard Oil Co. The sale of these products will continue to be handled by Stanco, Inc., New York.

The sale of the business to the new corporation follows the signing of an agreement ending litigation between New Jersey Standard and Petroleum Chemical Corp. relating to patents controlling the manufacture of certain petroleum alcohols. Litigation in this connection has been in progress in the United States courts in Delaware and New Jersey.

Petroleum Chemical Corp. which in turn is controlled by Barnsdall Corp. and National Distillers Products Corp., has taken a substantial stock interest in Standard Alcohol Co. as a result of the agreement and formation of the Standard Alcohol. Both Barnsdall and National Distillers products will have permanent representation on the Standard Alcohol directorate.

F. H. Bedford, Jr., president of Interstate Cooperage Co., is president of the new Standard unit. F. W. Abrams, F. W. Moss and M. B. Hopkins are vice-presidents of the new alcohol company. The board includes all of the executive officers and, in addition, Thomas F. Brown, Frank A. Howard, N. E. Loomis, William Dewey Loucks, George W. McKnight, Seton Porter and E. B. Reeser. Mr. Reeser is president of Barnsdall Corp. Seton Porter is president of National Distillers Products.

The New York offices of Standard Alcohol will be at 2 Park Avenue.

Mennen Hall

Mennen Hall, newest unit in the men's dormitory system, was formally presented to Cornell University, Nov. 11, by the codonors, William G. Mennen, class of 1908, of Newark., and his sister, Mrs. Elma Mennen Williams. Dr. Farrand, president of Cornell, accepted the hall at the luncheon of the Cornell Alumn Corporation.

Contribute to Survey

Lambert Pharmacal Co. and the Federal Wholesale Druggists Association have each contributed $1,000 a year for five years to continue the work of the Committee on Use of the National Drug Store Survey.

Ubac Repackaged

London Pharmacal Co., New York, has repackaged "Ubac," athlete's foot preparation.

A New Line---Inexpensive!

M. NAEF & CO.

Geneva, Switzerland

NACO Jasmin No. 1594 — **$8.50 pound**

A modern, inexpensive and remarkably fine odor —a worthy addition to the Naef series of Jasmins.

NACO Fougere No. 1409 — **$9.00 pound**

Ideal for soaps, talcs, shaving lotions and bath salts. A true and inexpensive version of this present day popular note.

NACO Sweet Pea No. 1493 — **$8.50 pound**

A popular priced type, sweet and true to character. Recommended for use with Lilac, Honeysuckle, Rose and Jasmin in powders, talcs and extracts.

NACO Antherosia B. M. — **$12.00 pound**

An outstanding cream odor, guaranteed against discoloration. Particularly effective in conjunction with Floral bouquets and Oriental types.

NACO Toscanina No. 1447 — **$6.50 pound**

An entirely new odor note! Of a warm and sweet Heliotrope character, for use in extracts, powders and talcums particularly.

UNGERER & CO.

13-15 West 20th Street

NEW YORK

Monsanto on 5 Day Week

Monsanto Chemical Works and its domestic subsidiaries have adopted the five-day week.

In announcing this move, Edgar M. Queeny, president, said: "In its adoption, Monsanto has been activated by the desire to give its employes all practical assurance of continued employment, thus assisting in the current vital problem of unemployment, and by the realization that a shorter working period is the logical concommitant of industry's increasing efficiency.

"It is our belief that in the sharing of available work among a larger number of men and women lies one of the remedies for existing difficulties."

Five Day Week in Soap

Lever Bros. Co., Colgate-Palmolive-Peet Co., Proctor & Gamble Co., and the Perkins Soap Co. are among those members of the soap industry which have adopted a five-day week.

Terri Cosmetic Agents

Terri Cosmetics Corp., New York, has appointed the following sales representatives: Long Island, the Hose-Girod Co.; West Coast, E. K. Palmer; for jewelry trade in metropolitan New York, J. W. Johnson.

Cisenfield Buys Virginia Lee

Virginia Lee, Inc., Baltimore, has been sold to Benjamin Cisenfield of the Earle Soap Manufacturing Co., and will occupy a four-story building completely equipped with a laboratory and modern machinery.

Lionel Rogers Shave Products

Lionel Rogers Corp., New York, has been incorporated under the laws of Delaware and will market its line of "University Club" shaving necessities. Officers are president, Benjamin Frank; vice-president, Louis Shneider; and secretary and treasurer, Morris Silverstein.

Bopf-Whittam N. Y. Office

Bopf-Whittam Corp., Westfield, N. J., announces the opening of a New York sales office in the Empire State Building, that city.

Glass Products Co. Agents

Glass Products Co., Vineland, N. J., has appointed two new representatives, L. L. Whitlow in St. Louis and W. M. Curry in Atlanta, Ga.

Amer. Perf. Labs. Adds Puffs

American Perfumers Laboratories, Inc., New York, has added a puff manufacturing department to its organization.

Page Repackages

Page, a subsidiary of the Talcum Puff Co., New York, and Jacksonville, has recently repackaged its line.

Superior Products Now Volupte

Superior Products Corp., New York, has changed its name to Volupte, Inc.

Criticizes Plastic Makers

"The plastics industry has failed to do the most elementary things that must be done in order to create a demand for its products—create a word by which the product can be demanded and endow that word with desire-arousing attributes," according to L. W. Hutchins, of the firm of Sheldon, Morse, Hutchins & Easton, New York, marketing counsellors.

Danco Agent

Gerard J. Danco, New York, cosmetic raw materials, has appointed Clayton F. Shoemaker, Jr., to represent his firm in Philadelphia.

G. E. Plastics to Pittsfield

General Electric Co. has moved its plastic department from Meriden, Conn., to Pittsfield, Mass. Sales offices continue at Lynn, Mass.

New Boots Plant

Boots Pure Drug Co., London, England's largest drug chain, is reported to be completing its new manufacturing and packing plant, said to be the largest reinforced concrete building in Great Britain.

New Products

DEVILBISS PRO-TEK CREAM

DeVilbiss Co., Toledo, has entered the cosmetic business with "Pro-Tek," described as a white cream which when rubbed into the skin forms a protective film soluble only in water. This film forms an "invisible glove" which is said to afford complete protection against sticky substances and soiling materials.

FIVE ABBOTT PRODUCTS

Abbott Laboratories, North Chicago, has announced several new products including "Haliver Oil Plain," "Haliver Malt with Viosterol," "Cofron Elixir," "Antigen of Besredka," and "Bacteriophage."

NADA-MAS

Nada-Mas Laboratories, St. Paul, has been formed to market a new hair preparation, "Nada-Mas," designed to color hair. The company was formed by Arthur J. Welsh, formerly with the Van Ess Laboratories, Inc., Chicago, and the Anacin Co., of that city.

CALCO'S MAGNESIUM PRODUCTS

Magnesprin is the trade-mark name of tablets of aspirin potentiated by magnesium. It is offered by Calco Chemical Co., Bound Brook, N. J. Literature has contained many references to this action of magnesium when used with aspirin. Packaged in bottles of 100 tablets. Each tablet contains 3½ grains of aspirin, which because of the magnesium present, is the equivalent in effect of five grains of aspirin. Less of the undesirable effects of aspirin, with all the desirable effects is the advantage claimed. Product is manufactured under patent issued June 11, 1929. It is being advertised in medical journals, by direct mail to physicians, and by detail men.

Magnecylate is a second product of Calco Chemical Co. in which sodium salicylate is potentiated by magnesium in a manner similar to Magnesprin. Each tablet contains three grains of sodium salicylate which is the equivalent of five grains of sodium salicylate because of the magnesium present in the tablets.

Magnepyrine is the third of the products introduced by Calco Chemical Co. containing magnesium to give the same effect with less of the effective product. Each tablet contains 2½ grains of amidopyrine which is equivalent to five grains of amidopyrine because of the magnesium present.

THREE McKESSON PRODUCTS

McKesson & Robbins, Inc., has added three new products to its line—"McKesson's Vitamin Concentrate of Cod Liver Oil," "McKesson's Phospho-Vitamin B" for the treatment of neurasthenia, asthenia and Vitamin B deficiency, and "McKesson's Copper-Iron Compound" in tablet form for the treatment of anemia.

A. M. A. Accepts

BILIPSOL

Bilipsol, manufactured by Laboratories Francais de Chimiotherapie, Paris, and distributed by Ulmer Laboratories, Minneapolis. Proposed as a means of obtaining the systematic effects of bismuth in the treatment of syphilis.

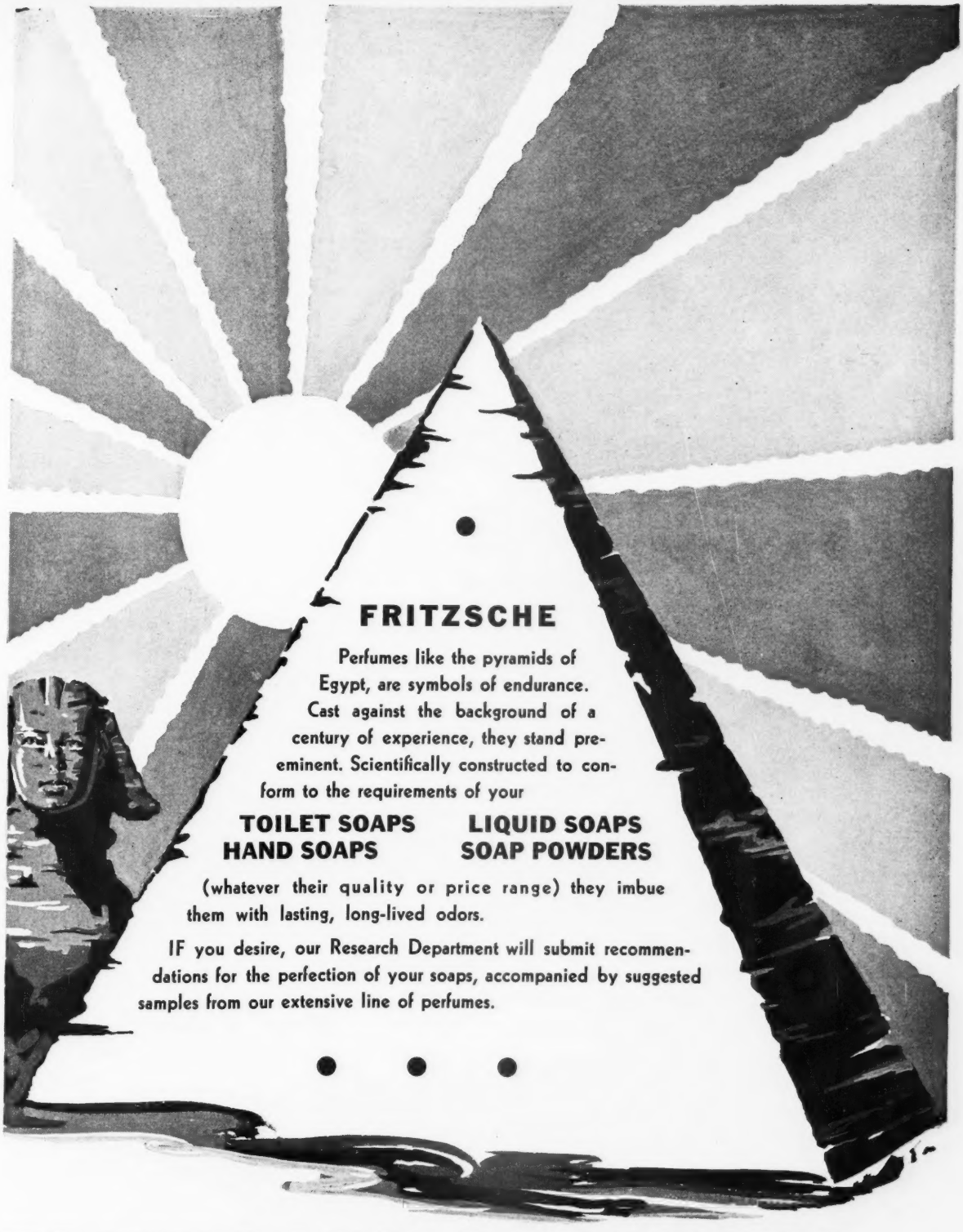
DIPHTHERIA TEST P. D.

Diphtheria Immunity Test and Diphtheria Toxoid, manufactured by Parke, Davis & Co., Detroit.

A. M. A. Rejects

REINSCHILD AGAR PRODUCTS

In the case of a series of agar preparations marketed by the Reinschild Chemical Co., New Rochelle, N. Y., the Council declared Lupulin-Agar, Simaruba-Agar, and Sumbul-Agar not acceptable for New and Nonofficial Remedies because the use of lupulin, simaruba and sumbul is not justified and declared Tannin-Agar and Gambir-Agar unacceptable because agar is


FRITZSCHE
Perfumes like the pyramids of Egypt, are symbols of endurance. Cast against the background of a century of experience, they stand pre-eminent. Scientifically constructed to conform to the requirements of your
TOILET SOAPS
LIQUID SOAPS
HAND SOAPS
SOAP POWDERS
(whatever their quality or price range) they imbue them with lasting, long-lived odors.
IF you desire, our Research Department will submit recommendations for the perfection of your soaps, accompanied by suggested samples from our extensive line of perfumes.

FRITZSCHE BROTHERS INC.

Proprietors of
PARFUMERIES DE SEILLANS
Seillans, France

118 W. Ohio Street
Chicago

78-84 BEEKMAN ST.,
NEW YORK, N. Y.

Sole Agents in U. S. and Canada for
SCHIMMEL & COMPANY
Miltitz (near Leipzig) Germany

FRITZSCHE BROS. of Canada, Ltd.
77-79 Jarvis Street, Toronto

not an acceptable vehicle in the treatment of irritative conditions of the gastro-intestinal tract, and because the dosage of the astringents in these fixed-ratio preparations appears to be inadequate.

HEPATEX P. A. F.

Hepatex P. A. F. (Evans Sons, Lescher & Webb, London, England, Thomas A. Hedley, New York, American agent), because it is marketed under a proprietary, insufficiently descriptive name without adequate declaration of composition, because there is no adequate evidence for the safety of the recommended intravenous use, and because the claim that the product is "the preparation of its kind" is unwarranted.

A. D. A. Accepts

SODIUM PERBORATE, HENNEN

Sodium Perborate, Flavored—Hennen and Hennen's Tooth Powder, manufactured by Hennen Porducts, Wheeling, W. Va.

Trade Literature

ABBOTT LABORATORIES

Abbott Laboratories, North Chicago, has published an attractive, illustrated, three-color booklet which furnishes a quick reference list of most popular Abbott products.

DOROTHY GRAY

Dorothy Gray, New York, has published a new booklet "Your Dowry of Beauty." This booklet is the first the company has had in two years and has been entirely re-written from beginning to end.

SANDALWOOD OIL B. P.

Because of the issuance of the new British Pharmacopoeia, Trade Commissioner for Mysore in London has issued an interesting and attractive brochure on Oil Sandalwood, distilled from Santalum Album, linn. The brochure calls attention to the characters and quality of East Indian Sandalwood Oil. Due to the fact that the Australian Sandalwood oil has been listed in the new British Pharmacopoeia, some may confuse the two oils and supply one for the other. As a matter of fact, the Australian Sandalwood oil is listed in the B. P. under a separate monograph entitled, "Oil of Australian Sandalwood." Therefore this oil must only be supplied when Australian oil is specified. Because of the fact that only the East Indian oil answers the specifications of the monograph in the B. P. for Oil of Sandalwood, it is stated that when Oil of Sandalwood, B. P. is ordered, the East Indian oil must be supplied.

Tanna-Menthol, Inc.

Tanna-Menthol, Inc., has been organized to replace the former Tanna-Menthol Co., Tulsa, Okla.

Owens-Illinois Buys Root Glass

Owens-Illinois Glass Co., Toledo, has announced the completion of plans for the purchase of the Root Glass Co., Terre Haute, Inc. C. J. Root became a director of the Owens-Illinois company.

Don Baxter to Rebuild

Don Baxter, Inc., Glendale, Calif., announces that plans are being made to rebuild the detached building used as workhouse and store-room which was recently destroyed by fire with estimated damage of about $10,000.

Removals

R. M. KRAUSE, INC.

Richard M. Krause, Inc., New York, has announced its removal to larger quarters at 52 E. 19 st., that city. The move was reported as being necessary to take care of constantly growing business and to increase the company's facilities and service. The new telephone is ALgonquin 4-1620.

ROBERT GAIR CO.

Robert Gair Co., has moved its executive and New York sales offices to the new Commerce building, 155 East Forth-fourth street, that city, in order to obtain additional space. The new quarters provide 50 per cent. more space than in its former offices, the company occupying the entire eleventh floor of the Commerce building, an area of about 12,000 square feet.

Castile Soap Case Again

Review of the castile soap case was asked of the Supreme Court of the United States, October 27, by the Federal Trade Commission in a petition for a writ of certiorari to the seventh circuit court of appeals which set aside the commission's cease and desist order against James S. Kirk & Co., Chicago, now owned by the Procter & Gamble Co.

After an extended investigation the commission ordered the company to stop using the term, "Castile," on any soap not having olive oil as the exclusive fatty ingredient. Part of the evidence was a popular bulletin on cleansing materials issued by the United States Bureau of Standards, defining castile soap as an olive oil soap. During the proceedings the Bureau of Standards issued a revised edition of this bulletin in which it was stated that the term, "Castile," was often used for other than olive oil soaps and that the legality of this practice was then being litigated. On the basis of this second edition, the circuit court set aside the commission's order on the ground that one branch of the Federal government could not forbid what another branch accepted.

In asking supreme court review, the commission declares that the circuit court did not disturb any of the commission's findings and challenges the theory that the Bureau of Standards has authority to give Federal government approval to any trade practice that a paragraph in its bulletin should be given greater weight than the extensive investigation of the Federal Trade Commission, or that the bureau has power to nullify the commission's orders.

T. P. Taylor & Co.

T. P. Taylor & Co. has been formed in Louisville, Ky., with capital of $25,000 for the reported purpose of recovering and resuming management of the chain of drug stores sold several years ago to the Whelan Drug-United Cigar group. The Whelan Drug Co. of Kentucky recently applied for a receivership.

There are thirteen stores in the former Taylor chain; three of them have been closed for some time because of rental disagreements, but the stocks are intact. The receivership of the Whelan Kentucky company was set aside shortly after it had been granted, owners of property occupied by the stores having contended that the failure of the parent Whelan organization should not have affected the Kentucky subsidiary.

Mid-South Druggists

Mid-South Druggists, Inc., has been chartered to establish a cooperative wholesale drug house in Memphis. The company was incorporated by Charles H. Albright, Memphis, and John N. Wingate and E. W. Crossan, Cleveland.

Charles H. Albright was formerly treasurer of the Van Vleet-Ellis Corporation and John N. Wingate has been connected with the Mutual Drug Co. The Mutual Drug Co., Cleveland, has an operating contract with Mid-South Druggists, Inc.

Blackman & Blackman Moves

Blackman & Blackman, Inc., New York, pharmaceuticals, has taken larger space at 443 Broadway, that city.

Abbott in Indianapolis

Abbott Laboratories, North Chicago, has opened a new branch in Indianapolis at 215-217 North Senate Ave., where the complete line of Abbott, Swan-Myers and D-R-L pharmaceutical and biologic products will be stocked. F. W. Scheigert, formerly secretary of the Abbott Laboratories will be branch manager. All other members of the Indianapolis organization have had long experience with the Swan-Myers Company in meeting the needs and conditions of the territory served by this branch. This branch was established to better serve customers in this district.

To dispel confusion and reaffirm our forty-two year old policies,

We Respectfully Submit:

That, under no temptation do we buy merchandise off the auction block of drug firms discontinuing business. Botanicals so obtained too often are old, deteriorated and offer bad value at any price.

That, for the same reasons, we deliberately decline to buy the stocks of bankrupt concerns, which we could offer at prices far below the price of prime, sound merchandise. We deem it better business not to do so.

That, in nearly all foreign and domestic crude drugs there are from two to ten different grades and that current prices are low enough to use the best.

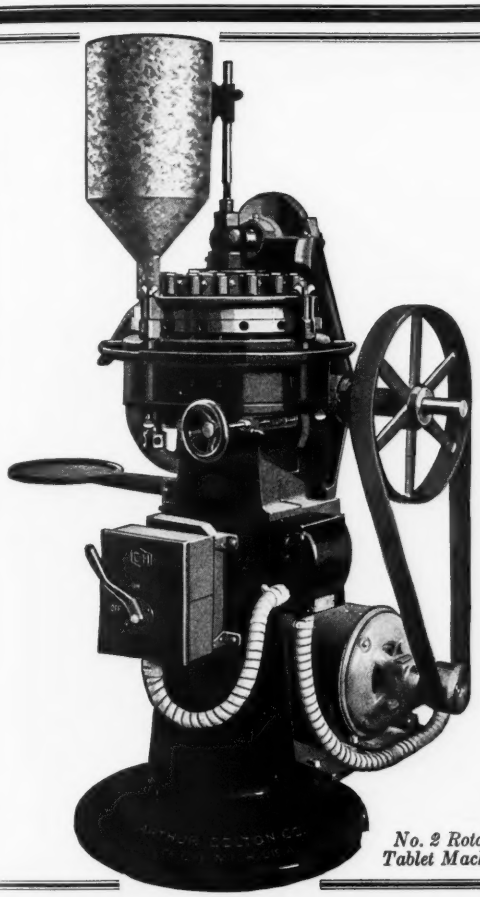
From our New York Warehouses and Drug Mills we offer a complete stock of foreign and domestic Botanical Crude Drugs, covering every article for which a commercial demand exists.

All merchandise we supply, coming to us from every corner of the world, is natural, true-to-name, and determined in our laboratories botanically, chemically and physiologically under professional supervision. This dispels all doubt as to quality.

The World's Best Drugs Our Chief Attraction

J. L. HOPKINS & CO.

New York



No. 2 Rotary Tablet Machine

New and Improved!

We have no yearly models—but improvements and refinements are being constantly added to Colton machines.

There are over five hundred Colton Rotaries in use.

Superior design, sturdy construction and ease in operation have made this possible.

The No. 2 Rotary Tablet Machine has such desirable features as *positive pressure*, eliminating varying thicknesses of tablets; *hardened steel gear drive*, eliminating frequent replacement of worms used on other makes, and *sliding upper punch holders*, to hold the punches rigidly, enabling the manufacture of special shaped tablets most satisfactorily.

Write for Catalogs.

ARTHUR COLTON COMPANY

2620 East Jefferson Ave.

Detroit, Michigan

Canadian Tariff Changes

Import tariff duties now levied by Government of Canada upon proprietary articles, including changes recently effected in accordance with British-Canadian trade pact concluded at Ottawa in August, are as follows:

Item 159. Spirits and strong waters of any kind, mixed with any ingredient or ingredients, as being or known or designated as essences, extracts, or ethereal and spirituous fruit essences, not otherwise provided:

British preferential rate, $8.00 per gallon plus 30% ad valorem;

Intermediate rate, $10.00 per gallon plus 30% ad valorem;

General rate, $10.00 per gallon plus 30% ad valorem.

Item 159-A. Spirits and strong waters of any kind, mixed with any ingredient or ingredients, as being or known or designated as anodynes, elixirs, tinctures or medicines, not otherwise provided:

British preferential rate, $3.00 per gallon plus 30% ad valorem;

Intermediate rate, same;

General rate, same.

Item 160. Alcoholic perfumes and perfumed spirits, bay rum, cologne and lavender waters, lotions, hair, tooth and skin washes, and other toilet preparations containing spirits of any kind:

(a) In bottles or flasks containing not more than four ounces each:

British preferential rate, 60% ad valorem;

Intermediate rate, 90% ad valorem;

General rate, 90% ad valorem.

(b) In bottles, flasks or other packages, containing more than four ounces each:

British preferential rate, $5.00 per gallon;

Intermediate rate, $5.00 per gallon plus 40% ad valorem;

General rate, $5.00 per gallon plus 40% ad valorem.

Item 162. Medicinal or medicated wines, including vermouth and ginger wines, containing not more than 40% of proof spirit:

British preferential rate, 80% ad valorem;

Intermediate rate, same;

General rate, same.

Item 178. Advertising and printed matter, viz.; Advertising pamphlets, advertising show cards; price books, catalogues, and price lists; advertising almanacs and calendars; patent medicine or other advertising circulars, fly sheets or pamphlets:

British preferential rate, $0.05 per pound;

Intermediate rate, $0.125 per pound;

General rate, $0.15 per pound or 35% ad valorem, whichever is greater.

Item 178-A. Provided, that on goods specified in item 178 and imported by mail from and after July 1914, duties may be paid by customs revenue stamps, under regulations by Minister at rate specified in said item, except that on each separate package weighing not more than one ounce, duty shall be:

British preferential rate, $0.02 each;

Intermediate rate, same;

General rate, same.

Item 206. Vaccine; sales of quinine:

British preferential rate, Free;

Intermediate rate, same;

General rate, same.

Item 206-A. Bacteriological products or serums for subcutaneous injections:

British preferential rate, Free;

Intermediate rate, 20% ad valorem;

General rate, 20% ad valorem.

Item 219-A. Non-alcoholic preparations or chemicals, for disinfecting, dipping or spraying, not otherwise provided:

British preferential rate, Free.

Intermediate rate, 15% ad valorem;

General rate, 15% ad valorem.

Item 219-C. Non-alcoholic preparations or chemicals, as are used for disinfecting, dipping or spraying, when in packages not exceeding three pounds each, weight of packages included:

British preferential rate, 5% ad valorem;

Intermediate rate, 25% ad valorem;

General rate, 25% ad valorem.

Item 220. All medicinal, chemical and pharmaceutical preparations, compounded of more than one substance, including patent and proprietary preparations, tinctures, pills, powders, troches, lozenges, syrups, cordials, bitters, anodynes, tonics, plasters, liniments, salves, ointments, pastes, drops, waters, essences and oils, not otherwise provided:

(a) When dry:

British preferential rate, 20% ad valorem;

Intermediate rate, 25% ad valorem;

General rate, 25% ad valorem.

(b) Liquid, containing not more than 2.5% proof spirit:

British preferential rate, 25% ad valorem;

Intermediate rate, 40% ad valorem;

General rate, 40% ad valorem.

(c) All others:

British preferential rate, 60% ad valorem;

Intermediate rate, same;

General rate, same.

Note: Drugs, pill mass and preparations, not including pills or medicinal plasters, recognized by British or U. S. pharmacopoeia, or French Codex as officinal, shall not be covered by this item.

Note: Any article classified under this item containing more than 40% proof spirit shall be rated for duty as follows:

British preferential rate, $3.00 per gallon plus 30% ad valorem;

Intermediate rate, same;

General rate, same.

Item 227. Whale oil soap:

British preferential rate, Free;

Intermediate rate, same;

General rate, same.

Item 230. Castile soap, weight of cartons and wrappings included:

British preferential rate, Free;

Intermediate rate, $0.02 per pound;

General rate, $0.02 per pound.

Item 234. Perfumery, and toilet preparations, non-alcoholic, viz., hair oils, tooth and other powders and washes, pomatums, pastes and all other perfumed preparations not otherwise provided, used for hair, mouth or skin:

British preferential rate, 20% ad valorem;

Intermediate rate, 40% ad valorem;

General rate, 40% ad valorem.

Item 274. Vaseline, and all similar preparations of petroleum, for toilet, medicinal or other purposes:

British preferential rate, 15% ad valorem;

Intermediate rate, 22.5% ad valorem;

General rate, 25% ad valorem.

ADMINISTRATIVE PROVISIONS

Dutiable Value: Dutiable value of merchandise for assessment of ad valorem duty is its so-called "fair market value." This fair market value may not be lower than selling price of merchandise to jobbers or wholesalers generally at time and place of shipment direct to Canada. If merchandise is new and unused, its fair market value may not be less than actual cost of production of similar merchandise on date of shipment direct to Canada, plus reasonable advance for selling cost and profit. Canadian Minister of National Revenue is sole judge as to what constitutes "reasonable advance."

No discount or deduction not shown and allowed and deducted on invoices covering sales for home consumption in exporting country is allowed in estimating value for customs purposes in Canada. However, Canadian importers, when remitting amount of invoices, may take advantage of cash discounts regularly extended to customers of shipper in exporting country, without being subject to payment of dumping duties.

Fair market value of merchandise subject to payment of manufacturers' excise taxes in United States includes such excise taxes, even though taxes are not actually payable to United States Government when otherwise taxable merchandise is exported.

Dumping duties apply to imported merchandise of class made in Canada, if sold to Canadian importers at less than an acceptable "fair market value." They amount to difference between such fair market value and lower selling price to Canadian importers, but they may not exceed 50% of invoice value in any case.

Computation of Duties: British preferential rates are applied to merchandise imported from practically all parts of British Empire. Special discount of 10%

Agfa

AMBRETTE BASE 6003

The ambrette seed note has always been highly regarded by perfumers not only for its fixative qualities, but also for its sweet, rich, characteristic aroma. It imparts body and depth and an exquisite fineness. Its high price has been a deterrent to its general use. With Ambrette Base 6003 this odor may be obtained at a very economical figure and the range of its application is greatly widened.

Other aromatic specialties produced by the AGFA:

Bigarol
(Synthetic Neroli Base)

Carnetton
Pimenol
Dianthus Bases

Aldehyde F K
Lilac Base

Arosol—the universal fixative

Cyclamal
An aldehyde imparting a floral top note of great intensity

Cuminic Body
One of the most persistent bodies known

Floranol
Base for Rose synthetic. Very reasonable

Gardeniol
Rosein
Rosefolia
Aldehydes C 8 to 18
Amyl Salicylate
Benzalacetone
Bromstyrol
Cinnamic Aldehyde
Dimethyl Anthranilate
Jasmolid
Phylloflor
Resedalia
Hydratropic Aldehyde
Hydrocinnamic Aldehyde
Indol
Methyl Anthranilate
Styralyl Acetate
Styralyl Alcohol
Vanillose (Ethyl Vanillin)

GENERAL DRUG CO.

170 Varick Street
New York

907 Elliott Street
Windsor, Ont.

556 W. Congress Street
Chicago, Ill.

Phone: HArrison 7441

"FALBA" . . . . .
ABSORPTION BASE

An Oxycholesterin Product

Oxy-Cholesterin, "The Heart of Lanoline" with all its therapeutic skinsoothing qualities multiplied manifold is made available in convenient form, ready to use by FALBA ABSORPTION BASE.

Neutral **Acid & Alkali Resistant**

- FALBA ABSORPTION BASE will readily take up and hold up to five times its own weight of water. This water absorption does not thin out the finished product, but makes it firmer.
- FALBA ABSORPTION BASE does not contain Petrolatum; but any of the usual cream and salve ingredients such as Petrolatum, Lanoline, Oils, and Waxes can be compounded with it.
- FALBA ABSORPTION BASE allows the use of ingredients not possible in the old type base. It requires no preservative.
- FALBA ABSORPTION BASE acts as color solvent and diffusing agent in lipsticks, eliminating streakiness, greasiness, hardness and harshness.

Further suggested uses, samples and detailed information will be gladly sent on request.

LANOLINE, U. S. P.
Hydrous and Anhydrous

Beeswax---Sunbleached

Spermaceti

LAN-ODOR
A perfume oil scientifically compounded for use in Lanoline Creams.

Pfaltz & Bauer, Inc.
300 PEARL STREET · NEW YORK CITY

of these rates of duty is allowed with respect to merchandise convened from British possession directly to Canada, without transhipment or transhipped but once at port in British possession.

Intermediate rates are applied to merchandise imported from those countries with which Canada has negotiated commercial treaties. These include Brazil, Italy, Czechoslovakia, Denmark, Belgium-Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Argentina, Colombia, Venezuela, and Japan. To enjoy benefit of these intermediate rates such merchandise must have been conveyed directly to Canada, without transhipment.

General rates are applied to merchandise imported from countries having no commercial treaty with Canada, including United States; and to that imported indirectly from countries otherwise entitled to benefit of lower rates of duty.

Special Excise Tax: In addition to duties specified in foregoing schedules a special excise tax is collected upon imported merchandise at 3% of its duty paid value. Merchandise forwarded to Canada by mail or express and having duty-paid value of not more than $25.00 is exempt from payment of tax.

Sales Tax: In addition to duties specified in foregoing schedules and of special excise tax described in paragraph immediately preceding, there is collected a general sales tax upon merchandise herein specified. This sales tax is 6%, and is computed upon duty-paid value with respect to imported merchandise.

Cosmetics Down 19.3%

The Bureau of the Census has announced that, according to a preliminary tabulation of data collected during 1932, the production of perfumes and cosmetics during 1931 amounted to $162,681,341, a decrease of 19.3 per cent. from the $201,689,154 during the preceding census year in 1929.

Of the 1931 total, $127,571,898 was contributed by establishments engaged primarily in the manufacture of these commodities and $35,109,443 by establishments engaged primarily in other lines of manufacture. The more important items follow: Perfumes, $10,306,714; toilet waters, $1,908,281; creams, other than shaving cream, $25,016,367; lip sticks and lip rouges, $1,792,412; other rouges, $5,165,106; dentifrices, $35,606,527; hair tonics, $7,303,081; face powders, $18,659,953; talcum powders $7,274,389; hair dressings, $5,446,330; face lotions, $5,638,198; manicure preparations, $4,501,743.

The number of establishments engaged in the above lines last year was 657, compared with 815 during 1929. Average wage earners engaged during 1931 was 10,664, against 13,109 during the previous census year.

New Liggett Corporations

The Liggett Co., Inc., has been incorporated under the laws of Massachusetts to engage in the sale and manufacture of drugs, medicines, patent medicines, prescriptions, cosmetics, refreshments, etc., and to own and conduct warehouses and retail and wholesale stocks in the United States and elsewhere. The authorized capital of $10,000 consists of 100 common shares of $100 par value.

Liggett Co., Inc., of Richmond, with maximum capital of $10,000, has been granted a charter by the State Corporation Commission to deal in drugs and drug sundries.

The incorporators of the Massachusetts Company are three persons in the employ of Prentice-Hall, legal agents and tax experts. The clerk is Brenton K. Fisk, attorney for the United Drug Co. The Louis K. Liggett Co., retail subsidiary of Drug, Inc., has consented to the use of the name Liggett Co., Inc.

John C. Goodwin of Richmond is president of the Virginia Company. Shewmake & Gary of Richmond are counsel for the company.

In a letter sent recently to landlords of Louis K. Liggett Co., George Gales, president, warned that reorganization of the company would follow refusal of the landlords to revise the terms of the company's leases owing to its heavy losses.

The Louis K. Liggett Company, all of whose stock is owned by United Drug Co., is a Massachusetts company. It operates 555 drug stores in the United States.

Dow Drug Receivership

As a result of receivership proceedings filed by the Dow Drug Co. of Ohio against the Dow Drug Co. of Delaware, a subsidiary, Joseph R. Knoch former general manager of the Delaware company, was appointed October 31 as receiver by the Federal district court in Pittsburgh.

In a statement issued by D. C. Keller, president, Dow Drug Co. of Ohio, it was stated that the receivership proceedings in Pittsburgh do not involve in any manner the affairs of the Ohio company. It was further stated that the Ohio company was the sole merchandise creditor of the Delaware company and inasmuch as the Pittsburgh stores have not been operating at a profit it was decided that legal proceedings be started to effect desired liquidation. High real estate rentals for stores in the Pittsburgh area, it was understood, were leading factors in the situation.

It was also stated that nothing will affect bills against the Dow Drug Co. of Ohio outstanding on the date of the proceedings irrespective of the point to which goods were shipped and all bills will be paid promptly now and in the future.

McKesson Reduces Bank Loans

Outstanding bank loans and letters of credit of McKesson & Robbins, Inc., were reduced from $1,820,000 on Dec. 31 last to $2,900,000 on Aug. 31, according to an announcement by F. Donald Coster, president. Since Aug. 31 the amount has been reduced to approximately $2,750,000, or by $2,070,000.

The company's sales volume has shown a steady gain since early Summer, Mr. Coster said. Sales for September were within striking distance of the total reported for June, when the industry experienced a pre-tax rush for merchandise. Part of the increased sales in September was seasonal. While it is too early to state that improvement had definitely set in, it seems evident that the long-continued downward trend has been broken, Mr. Coster said. The Eastern and Pacific Coast sections showed the best sales, although there has been some improvement in the coal regions, he added.

"Following the pre-tax rush of sales in June," Mr. Coster said, "there was a sharp drop in July. August sales, while showing a gain of 10.5 per cent. over July, were, however, below the June-July average, and September recorded a gain of six per cent. over August, 17 per cent. over July and 3.4 per cent. over the June-July average. This upward swing in sales is in direct contrast with the movement between June and September, 1931, when the trend was still irregularly downward."

Earnings and Dividends

AMER. COM. ALCOHOL

American Commercial Alcohol Corp. reports for nine months ended Sept. 30: Net income after depreciation and all charges, $404,822, equal to $2.07 a share on 194,747 $20 par capital shares outstanding, contrasted with loss of $262,828 last year. Quarter ended Sept. 30: Net income after above charges, $160,417, equal to 82 cents a share on 194,747 shares outstanding, against $136,148, or 70 cents a share, in the preceding quarter and $219,886 loss in third quarter of 1931.

AMER. HOME PRODUCTS

American Home Products Corp., reports for six months ended June 30: Net profit after depreciation, $1,450,042, against $1,694,983 in the 1931 period; net sales, $8,567,547, against $8,103,952; operating profit, $2,011,786, against $2,012,662; total income, $2,093,346, against $2,109,031. On June 30 total assets were $24,858,896, current assets, $6,018,432, including $1,455,173 cash; current liabilities, $2,832,115, and earned surplus, $5,461,530. On Dec. 31 total assets were $24,815,828, current assets, $6,310,195, including $1,827,298 cash; current liabilities, $2,818,888, and surplus $5,297,003.

HAVE • YOU • A • PROBLEM

of

- MIXING
- EMULSIFYING
- FILTERING
- FILLING
- CAPPING
- LABELING
- CARTONING
- WRAPPING

bring it to

FRANCIS CHILSON
PRODUCTION AND PACKAGING ENGINEER
101 • WEST • THIRTY • FIRST • STREET • NEW • YORK

WE • WILL • SOLVE • IT

OTTO ROSE

A SAMPLE!

Will convince you of the value of "Union Bulgare" OTTO of ROSE.

"Send for one"

- Produced in the distilleries of the Union Générale des Coopératives Bulgares.
- Guaranteed by the Bulgarian Government.
- Sold direct to consumers in original sealed containers.

Sole Agents for the U. S.
W. J. BUSH & CO., Inc.
New York Chicago National City, Cal.

Sole Agents for Canada
W. J. BUSH & CO., (Canada) Limited

Package Designing

EMIL A. SCHAEDLER
18 East 41st Street, New York
LEXINGTON 2-0873

MYSORE GOVERNMENT
Sandalwood
Oil

Distilled from
Santalum Album

INSIST ON ORIGINAL CANS AND CASES

Agents for the United States and Canada

W. J. BUSH & CO.
(Incorporated)
Essential Oils
New York
Chicago National City, Calif. Montreal

AFFILIATED PRODUCTS

Affiliated Products, Inc., and subsidiaries report for nine months ended Sept. 30: Net profit after taxes and other charges, $533,690, equal to $1.39 a share on 382,800 no par capital shares. Quarter ended Sept. 30: Net profit, $225,364, equal to 58 cents a share, against $152,764, or 40 cents a share, in preceding quarter. Comparisons with 1931 unavailable.

ANCHOR CAP

Anchor Cap Corp., reports for quarter ended Sept. 31: Net profit, $130,468, after charges and taxes, equal to 34 cents a share on 227,758 common shares, compared with $152,819, or 44 cents a share on 227,758 common shares in preceding quarter, and $271,947, or 95 cents a share on 230,758 common shares, in third quarter of 1931. Nine months ended Sept. 30: Net profit, $372,372, after depreciation, amortization, Federal taxes and other charges, equivalent, after dividend requirements on the $6.50 preferred stock, to 95 cents a share on 227,758 no par shares of common stock, excluding the shares in the treasury. This compares with $719,394, or $2.44 a share on 230,758 common shares, in the first nine months of last year.

COMMERCIAL SOLVENTS

Commercial Solvents Corp., reports for nine months ended Sept. 30: Net profit after depreciation, Federal taxes and other charges, $894,836, equal to 35 cents a share on 2,530,218 no par common shares, compared with $1,780,601, or 70 cents a share on 2,530,060 common shares in 1931. Quarter ended Sept. 30: Net profit after above charges, $305,562, equal to 12 cents a common share, against $295,820, or 12 cents a share on 2,530,200 common shares, in preceding quarter, and $598,258, or 23 cents a share on 2,530,060 shares, in third quarter of last year.

DOW CHEMICAL CO.

Dow Chemical Co., has declared dividends as follows payable November 15 to stockholders of record at the close of business November 1, 1932: preferred stock 1¾%; non-par value stock 50c per share.

DRUG, INC.

Net profit of Drug, Inc., and its subsidiaries for the quarter ended on Sept. 30 amounted to $2,846,246 after interest, depreciation, Federal taxes, subsidiary dividends and other charges. This was equivalent to 81 cents a share on 3,500,499 shares of stock, and compared with $3,119,124, or 89 cents a share, in the preceding quarter and $4,475,394, or $1.28 a share, in the September quarter last year.

For the first nine months of the year the company reports a net profit of $10,526,943 after charges and taxes. This was equivalent to $3 a share on 3,501,499 no-par shares, and compared with a net of $15,127,904, equivalent to $4.32 a share, in the first nine months last year.

KIMBERLY-CLARK

Kimberly-Clark Corp., reports for nine months ended Sept. 30: Surplus available for common stock after interest, Federal taxes and other charges, $127,726, equal, after preferred dividends, to 25 cents a share on 499,800 no-par common shares, compared with $1,130,041, or $2.26 a share, last year. Quarter ended Sept. 30: Surplus available for common stock, $14,756, equal, after preferred dividend requirements, to three cents a common share, against $17,663, or three cents a share, in preceding quarter, and $141,554, or 28 cents a share, in third quarter last year.

LAMBERT CO.

Lambert Co. reports for nine months ended Sept. 30: Consolidated net profit after taxes and other charges, $3,207,827, equivalent to $4.28 a share on 748,996 no par capital shares, against $5,361,317, or $7.16 a share, last year. Quarter ended Sept. 30: Consolidated net profit, $639,442, equal to 85 cents a share, against $1,147,699, or $1.53 a share, in preceding quarter and $1,788,787, or $2.39 a share, in third quarter a year ago.

MONSANTO CHEM. WKS.

Monsanto Chemical Works and subsidiaries report for nine months ended Sept. 30: Net profit after Federal taxes and other charges, $736,042, equal to $1.71 share, against $1,033,174, or $2.40 a share, last year. Quarter ended Sept. 30: Net profit after above charges, $201,821, equal to 47 cents a share on 429,000 no-par shares, against $258,361, or 60 cents a share, in preceding quarter and $361,720, or 84 cents a share, in third quarter of 1931.

OWENS-ILLINOIS GLASS

Owens-Illinois Glass Co., reports a net profit of $2,030,573 for the twelve months ended September 30, after depreciation and taxes. This was equal to $1.68 a share on 922,173 common shares after preferred dividends and compared with $2,792,841, or $2.51 a common share, in the preceding twelve months.

PEOPLES DRUG STORES

Peoples Drug Stores, Inc., reports for nine months ended Sept. 30: Net profit after depreciation, Federal taxes and other charges, $237,929, equivalent after deducting $108,558 dividends on 6½ per cent. preferred stock to $1.05 a share on 122,737 no-par common shares, against $338,447, or $1.80 a common share, in 1931. Quarter ended Sept. 30: Net profit after above charges, $65,953, equal to 25 cents a common share, against $70,483, or 28 cents a share in preceding quarter, and $91,406, or 43 cents a share, in third quarter last year.

SHARP & DOHME

Sharp & Dohme, Inc., reports for nine months ended Sept. 30: Net profit after depreciation, Federal taxes and other charges, $539,175, equal to $2.35 a share on 229,085 $3.50 preferred shares, compared with $763,509, equivalent after preferred requirements, to 21 cents a share on 776,627 common shares, in 1931. Quarter ended Sept. 30: Net profit after above charges, $227,504, equal after preferred dividends, to 3 cents a common share, against $167,653, or 73 cents a share on 229,085 preferred shares in preceding quarter, and $208,674, equal after preferred dividends, to one cent a common share in third quarter last year.

VADSCO SALES CORP.

Vadsco Sales Corp., and subsidiaries report for nine months ended Sept. 30: Net profit after taxes, depreciation and other charges, $19,771, equivalent to 40 cents a share on 48,628 7 per cent. preferred shares, against net loss of $97,339 last year. Quarter ended Sept. 30: Net loss after same charges, $39,333, against $24,009 loss in preceding quarter and $28,475 loss in third quarter of 1931.

ZONITE PRODUCTS CORP.

Zonite Products Corp., reports for nine months ended Sept. 30: Net profit after taxes and other charges, $523,251, equal to 62 cents a share on 845,556 $1 par shares, against $781,521, or 92 cents a share, last year. Quarter ended Sept. 30: Net profit, $132,075, equal to 15 cents a share, against $176,278, or 21 cents a share, in preceding quarter and $232,238, or 27 cents a share, in third quarter a year ago.

Industry's Stocks Sag

Prices of common stocks of corporations in the drugs and cosmetics industry have sagged with the rest of the stock market over the past two months, according to the stock price indexes of the Standard Statistics Co., New York. A comparison of the drugs and cosmetics index with that for 351 industrials over recent weeks follows:

		(1926 average equals 100)	
		Drugs and Cosmetics	*351 Industrials*
1932			
Oct.	5	67.8	49.4
	12	63.6	46.3
	19	64.7	49.1
	26	60.0	45.9
Nov.	2	60.9	43.8
1932	High	88.3	61.6
	Low	45.0	31.9
1931	High	133.8	114.7
	Low	82.4	51.4

Causes of Bankruptcies

Department of Commerce has issued a new bulletin, "Causes of Commercial Bankruptcies, which outlines 570 cases of commercial bankruptcies which were intimately studied as to cause and effect. Copies are available upon request.

PACK-URGES*

by "Duff" Gordon

BOXES GO GAY:

"Pronounced Contrasts" the newest note in evening and sports clothes, will soon be more apparent in packages for those products with definite feminine appeal . . . In fact the more restrained,—and in our opinion, better looking—perfume and powder boxes do not meet with very much enthusiasm from many of the leading toilet goods buyers who claim to know their public . . . Apropos of *the fashion note in packages*, we have some excellent ideas for those manufacturers anxious to find a new and timely note in boxes. (The ideas are free and the boxes more moderately priced than you would expect for such quality). Your call entails no obligation.

• • •

RECOMMENDED READING:

Miss Katharine Torrey's excellent reporting each month in the Good Looks section of Woman's Home Companion. We know of many people who buy cosmetics and perfumes solely upon her word, or through the recommendation of Miss Torrey's chief, Miss Hazel Rawson Cades . . . This interesting feature is of definite help to the entire toilet goods industry.

• • •

CHARACTER IN COLLAPSIBLE TUBES:

Careless of this fellow to lean on the tube that way—at least without first capping it— Even then most tubes would "give" with all that pressure . . . One of the outstanding features of National tubes is their capacity for punishment—a capacity founded on the inherent quality and workmanship. "Rigid inspection and careful processing" are National's standards—and at reasonable prices. In addition we maintain Art and Design Service free to our customers. . . . We are National's sales representative . . . See us before you buy tubes.

• • •

PERSONAL PREFERENCES:

The quiet ability of Noel Statham—Snow Top Chalk Prexy . . . The charm and artistry of Mary Chess (Mrs. Avery Robinson) . . . Herb Myers—Antoine's sales-building chief executive . . . The continental courtesy of M. (Pinaud) Michelin . . .

"Pack-Urges" is issued occasionally in the interests of better packages. If you wish to receive it regularly it will be sent free upon request. Address: ***H. R. M. Gordon*** *—A Complete Packaging Service—****331 Madison Ave.*** *(Phone Murray Hill 2-4626)* ***New York.***

*Copyright and trade-mark applied for.

THERE'S SALES APPEAL IN . .
. . . THE TUBULAR PACKAGE

A powder drum from Cleveland Tubes

A Tubular shape "does something" to a package that's hard to explain but certainly adds to its interest, draws you to it. And then, too, there's the item of economy. Our job is to help develop new, individual tubular packages, to achieve new economies, new sales appeal for our customers. Why not get in touch with us, now?

THE CLEVELAND CONTAINER CO.
10627 BEREA ROAD, CLEVELAND, OHIO

Plants: Cleveland, Detroit, Hoboken, Philadelphia
Sales Offices: Pittsburgh, Rochester, Chicago

"FILMA-SEAL"
(the double seal of cap and film)

Is used on many Nationally known products.

PREVENTS

EVAPORATION — LEAKAGE — TAMPERING

Send us a few of your packages to "FILMA-SEAL" and we will prove its advantages to you.

FERDINAND GUTMANN & CO.
Brooklyn, New York

Trade Marks Reg. Pats. Pending

Obituaries

William E. Upjohn

Dr. William E. Upjohn, founder and chairman of the board of the Upjohn Co., Kalamazoo, Mich., died at his summer home in Augusta, Mich., October 18, aged 79. He was born in Richland, Mich., received the degree of doctor of medicine from the University of Michigan in 1875 and ten years later established the Upjohn Pill & Granule Co., which later became the Upjohn Co.

He was the author of the city commission-manager form of government of Kalamazoo, having headed the commission which drafted the charter and taken an active part in the campaign which resulted in its adoption. He also served as first mayor under the new form of government. Recently he had been giving much of his time to the development of his farm properties near Richland, through which he hoped to promote an effective method of employment insurance for the people of Kalmazoo.

W. M. McCormick

Willoughby M. McCormick, founder and president McCormick & Co., Baltimore, died in New York, November 4, aged 68. He was born in Dover, Va., in 1864 and in the late eighties settled in Baltimore. He founded the business in 1889 and had been president of the company for forty years.

He was the organizer of the Favoring Extract Manufacturers' Association, the Spice Trade Association and the Tea Club. He was one of the organizers of the American Grocery Manufacturers' Association, and the Baltimore Commercial Bank, of which he was president for six years. He also was one of the organizers of the Chamber of Commerce of the United States and was on its governing board for a number of years. He was organizer and president of The Virginians of Maryland, member of the board of the Salvation Army and a director of the Baltimore Steam Packet Company. He was a director of the Maryland Casualty Company of Baltimore, The First National Bank of Baltimore, the Baltimore Association of Commerce, and the Baltimore Criminal Justice Commission. He was organizer and former Vice-President of the Baltimore Drug Exchange.

Manuel Hoffmann

Manuel Hoffmann, a son of Fritz Hoffmann, one of the founders of Hoffmann-La Roche, Inc., Nutley, N. J., died October 3 of injuries received when his automobile was struck by a railroad train near Basle, Switzerland. He was thirty-six, a director of the company and assistant to Dr. Emil Barell, director-in-chief of the Roche organization in Europe.

F. F. Ingram

Frederick Fremont Ingram, founder of the Frederick F. Ingram Co., Detroit, pharmaceuticals, died in San Diego, Calif., October 29, aged 76. He was born in Irving, Mich., was graduated from Olivet College, and entered retail drug business at Ypsilanti, Mich. Subsequently he was for several years a traveling salesman for a pharmaceutical manufacturer, and in 1885 became a partner in the firm of Milburn & Williamson, Detroit, pharmaceuticals. Five years later, this firm was succeeded by Frederick F. Ingram & Co., and in 1909 the name was changed to the Frederick F. Ingram Co., of which he continued as president.

During his residence of some forty years in Detroit. Mr. Ingram became one of its leading citizens. In 1913 he was elected a charter commissioner at large. From 1899 to 1905 he served on the Detroit Public Lighting Commission, holding its presidency for two terms. He had also been a member of the State Constitutional Convention and the Detroit Charter Commission and president of the Civic Forum Institute.

Mr. Ingram belonged to the American Academy of Political and Social Science, the Detroit Museum of Art Founders Society and the American Chamber of Commerce of London.

Otto von Schrenk

Otto von Schrenk, who for the past twenty-four years had been a leading figure in the prosecution of counterfeiters of drug products and legal advisor on patents and labels for Hoffmann-La Roche, Inc., Nutley, N. J., died at Bad Nauheim, Germany, October 14, aged 58. He was born in College Point, N. Y., and was a graduate of New York University Law School. He was also a director of the Heyden Chemical Co. and active in many other business, social, club and philanthropic activities.

Samuel Dempster

Samuel Dempster, chairman of the executive committee and treasurer, W. J. Gilmore Drug Co., Pittsburgh, wholesalers, died in that city October 29. He had been in the wholesale drug business for forty-six years.

Ernest Bilhuber

Ernest Bilhuber, who was associated with the Bilhuber-Knoll Corp., New York, pharmaceutical importer, died at his home in Meywood, N. J., November 7, aged 82.

Account Changes

Potter & Moore, London, England, cosmetics, to W. I. Tracy, Inc., New York.

Milaire Co., St. Louis, cosmetics, to McJunkin Advertising Co., Chicago.

Blackstone Products Corp., New York, "Tasty-Lax," to Peck Advertising Agency, that city.

Fem-Tex Products Co., Chicago, feminine hygiene products, to Kirtland-Engel Co., that city.

Christy Cosmetics, Inc., New York, to Dorland International, Inc., that city.

Iodobor Corp., New York, antiseptics, to ditto.

Parke, Davis & Co., Detroit, to Young & Rubicam, Inc., New York.

Ettlin, Inc., New York, drugs, to Bermingham, Castleman & Pierce, Inc., that city.

MacAndrews & Forbes Co., cough syrup, Camden, to Hampton, Weeks & Marston, Inc., New York.

Rejuvenol Co., Ft. Worth, proprietaries, to Hubbard Advertising, that city.

Harris Drug Co., New York, "Efracoids," to Mortimer Lowell Co., that city.

Herb Juice-Penol Co., Danville, Va., to Gottschaldt-Humphrey, Inc., Atlanta.

Aldon Distributing Co., New York, cosmetics, to Franklin Advertising Corp., that city.

Boyer International Laboratories, Chicago, cosmetics, to Green, Fulton, Cunningham Co., that city.

Kells Co., Newburgh, N. Y., medicines, to Small, Kleppner & Seiffer, Inc., New York.

Herbal Flaxolyn Co., Newburgh, N. Y., to ditto.

Lazell Co., Newburgh, N. Y., cosmetics, to ditto.

Dorothy Gray, New York, cosmetics, to Ruthrauff & Ryan, that city.

New Incorporations

Freeport-Triangle Chemical Corp.—I. J. Beck, Freeport, $50,000.

Hayden Laboratories, druggist—J. J. O'Connell, 15 W. 44 St., Manhattan, $5,000.

Rector Products Corp., medicines—G. N. Jesse, 11 W. 42d St., Manhattan, $20,000.

Salon de Stanlea, beauty parlor—M. H. Halpern, 151 W. 40 St., Manhattan, 200 shs com.

La Due Laboratories, cosmetics—Salter & Steinkamp, 342 Madison Ave., Manhattan, 100 shs com.

Scherk Corp., perfumery—Frank & Keve, 10 E 40th St., Manhattan, 200 shs com.

Mitcham Corp., perfumeries—Smith & Bowman, 122 E 42d St., Manhattan, 200 shs com.

Goray Pharmacal Co., druggist business—I. G. Wolff, 80 5th Ave, Bronx, N. Y., 200 shs com.

Frank Drug Corp., druggists—H. A. & E. C. Gordon, 300 Madison Ave., Manhattan, 99 shs com.

White Bear Products Co., chemists—H. Rubin, 1224 Walton Ave., Bronx, N. Y., $20,000.

Rouen Manufacturing Co., soaps, cosmetics—A. E. Rosenhirsch, 500 5th Ave., Manhattan, $10,000.

Ella Chemical Co., druggist business—F. A. Crimi, 63 Park Row, Manhattan, $500.

Natal Co., druggist business—A. Stuzin, Monticello, $10,000.

Buffalo-Lockwood Chemical Co., cosmetics—J. H. Little, Buffalo, $50,000.

Halibar Products, Inc., Newark, N. J., drugs—Charles Robinson, Newark, 2,500 shs com.

Egyptian Henna Products, chemicals—M. G. Palliser, 150 Nassau St., Manhattan, 100 shs com.

Sirve Products Co., druggist business—H. Borman, 144 Rivington St., Manhattan, $1,500.

Paris Distributers, perfumes, cosmetics—V. V. Zipris, 342 Madison Ave., Manhattan, 200 shs com.

Quaker Maintenance Supplies, chemicals—Bernstein & Kaplan, 295 Madison Ave., Manhattan, 200 shs com.

Rochester-Dermolia, druggist, business—A. F. Manes, Empire State Building, Manhattan, 1,000 shs com.

Buno Co., Inc., Philadelphia, Pa., hair tonics, patent medicines—Corporation Guarantee and Trust Co., $25,000.

Minrose Cosmetic Co.—Michaels & Michaels, 1,440 Broadway, Manhattan, 200 shs com.

Johns-Weiden Corp., chemists—H. L. Kapner, 358 5th Ave., Manhattan, $155,000 pf., 100 shs com.

Drug Markets

Review of conditions affecting markets and prices of chemicals, aromatics, essential oils, flavors, crude drugs and other raw materials, together with an alphabetical list of market prices.

Section also contains condensed review of patents and abstracts of particular interest to the chemist and those in charge of technical control.

Menthol Up Sharply

The feature of the chemical raw material market is the sharp rise in the price of menthol. Spot quotations are up to the basis of from $3.25 per pound in case lots to $3.40 per pound for less than case lots. The drastic rise in prices are noted when compared with our previous quotations a month ago, which showed the market range from $2.45 to $2.50 per pound.

Developments in the situation that resulted in the advance seem to have taken place entirely outside of this country. Spot quotations for some time prior to the rise had been below the import costs but buyers for consumption here did not take the situation very seriously. This probably carries out previous contentions that stocks in the hands of leading consumers were ample for at least their immediate requirements. At any rate buying on the part of consumers here has not been greatly influenced by the trend of prices. Transactions are said to be mostly between factors other than consumers with the latter still holding off awaiting further developments.

Buying on the part of London interests, however, are reported as in a large way, this being one of the factors leading toward a much firmer primary market. There was also said to have been a large short interest in menthol in Japan that resulted in a buying move of considerable proportions when the market first showed signs of its present tendency.

The greatest bullish factor, however, is the reports on the Northern Japanese crop. It was reputed in early September that this crop would total better than 800,000 kin of crude oil. The acreage planted was good but due to excessive rains the yield per acre was poor. Late reports state that the Hokkaido, or second Japanese peppermint crop is not expected to yield more than 550,000 kin.

The outlook for the future is uncertain. Some feel that the advance has been too rapid. A seasonable upswing in demand would lend support to sustain the advance as dealers here are not oversupplied.

The advance in the natural article, has again put the producers of synthetic menthol in a competitive position. Moderate interest has been shown on the basis of from $2.50 to $2.75 per pound.

Alcohol Prices Steady

The denatured alcohol market is firm with official schedules being maintained in all respects. Producers are carrying a very satisfactory volume of contract business on their books but as carry-over stocks in the hands of anti-freeze dealers are heavy, it is said that more than one cold snap will have to be experienced before distillers are called upon to make deliveries in a large way.

A more satisfactory movement of alcohol into industrial channels is also reported and this has lent support in creating a firm undertone to the market.

Current quotations for the period September 1, to December 31 are as follows: f. o. b. works on the basic formula completely denatured alcohol No. 5 with credit of 1c per gal. on three carlots or more.

C. D. A. 5 in drum carloads	$0.385
5 to 19 drums	0.445
1 to 4 drums	0.465

It is generally anticipated that in view of the present market position, the first quarterly market schedule for 1933 will see prices substantially the same as current quotations.

Cream of Tartar Competitive

The market for cream of tartar continues to reflect the keen competition that has resulted in many price reductions over a long period of time. Reductions during the past month amounted to ½c per pound placing this commodity at a new low for the movement. The current schedule:

Cream tartar U. S. P. powdered barrels per pound	.16¾
If 5 barrels	.16½
Cream tartar U. S. P. crystals barrels per pound	.17¾
If 5 barrels	.17

f. o. b. New York and Philadelphia. If shipped from St. Louis ½c per pound higher.

Aloin Firmer

The recent reduction in aloin, placing this commodity on a price basis of from 85c to 90c per pound, is said to have brought out a slightly better demand. Competition has not been so sharp at the lower levels so that the market in general presents a more steady undertone.

Camphor Lower

Importers of camphor acted in disregard of the replacement market in further reducing spot quotations. The current reduction amounted to one cent per pound placing the commodity on the following basis; refined slabs from 38c to 39c per pound, refined powder 39c to 40c per pound, tablets remain unchanged at from 46c to 47c per pound. Opinion still prevails that these prices are too low when cost to replace is considered, however, spot stocks are said to have been increased with resulting tenseness in the competitive situation.

The volume of United States natural crude camphor imports increased from 1,272,800 pounds during the first eight months of 1931 to 1,547,900 pounds in the similar period of 1932, the value declining, however, from $160,500 to $443,400, respectively. Receipts of natural refined camphor imports declined from 820,900 pounds valued at $395,200 in the 1931 period to 820,700 pounds worth $295,900 in 1932. Synthetic camphor received likewise declined from 1,397,300 pounds ($461,000) to 1,215,500 pounds ($339,000) in the current period.

Glycerin Steady

Very little inquiry is reported in the market for C. P. glycerin. Prices remain steady, however, because of the low prevailing quotations of 10¼c per pound. Most of the stocks are said to be in the hands of producers, with the pharmaceutical trade particularly low on stocks as indicated by the numerous requests for immediate delivery when ordering.

Imported material is still being offered in the New York market at low prices. This has caused some unsettlement in domestic circles. The question of tariff revision by the incoming administration has also been given consideration as it is generally agreed that no revision in the rate applying to glycerin could be stood.

No important sales are noted in crude, limited amounts changing hands at f om 4c to 4½c per pound.

Iodine Steady at Decline

No further developments are noted in the situation on iodine following the sharp reduction in crude material reported in our last market analysis. The market continues unchanged at $1.95 per pound.

Following the unusual trend in crude iodine imports during August, when about 424,000 pounds valued at $1,517,700 were received, bringing the total for the first eight months of 1932 to 630,200 pounds worth $2,223,000, September witnessed the negligible importation of 500 pounds ($814) from Japan. None was received from Chile.

Copper and potassium iodides are figuring more prominently in American import trade this year. Imports of copper iodide during the first seven months of 1932 amounted to 64,200 pounds, valued at $118,470, compared with 16,970 pounds worth $30,135 for the entire calendar year 1931. Netherland India was the sole consignor of this product. Receipts of potassium iodide in 1932 through July totaled 3,500 pounds, valued at $8,620, against 1,305 pounds, worth $3,830 for the entire year 1931. Japan was the origin.

Phenolphthalein Competitive

The competitive conditions that brought phenolphthalein U. S. P. down 10c per pound to the basis of 62c in 100 lb. lots is still operative to some extent. Business is moderate for this item.

Carnauba Wax Easy

All grades of carnauba wax are being offered a little more freely. No 1 is available at from 22c to 23c per pound, representing a decline of 3c per pound. The temporary spot shortage that had resulted in practically a nominal position for this item has been relieved by recent arrivals and prices were adjusted accordingly.

Imports of carnauba wax into the United States amounted to 411,000 pounds valued at $42,000 during September, 1932, against 43,000 pounds worth $10,000 in September, 1931. Receipts for the first nine months of this year, however, remain below those of the corresponding period of 1931, aggregating respectively 4,321,447 pounds valued at $509,361 and 5,848,836 worth $847,578.

Ipecac Firmer

Ipecac is in a firm position because of light stocks and the uncertainty concerning the ability of importers to replace in sizable quantities should the colder weather develop the anticipated demand. For some time now consumption has been considerably under normal so that a pick-up is said to be inevitable. Nicaraguan root is offered at from 70c to 75c per pound.

Mercury Up Slightly

Although demand for mercury has been routine, the market was advanced $1.00 per flask during the past month to the basis of from $49.00 to $50.00 per flask. The strength in mercury reflects the decline in production in the domestic mines. A general need is expressed from the Far West for increased production to meet Eastern demand but as yet the larger mines have shown no indications of re-opening at an early date. Production at present is mostly confined to small operators.

Mercurials Strong

With raw material advancing, the mercurial group has taken on a much firmer aspect. The rather sharp reductions that went into effect and were reported in our review last month has placed this group at new low levels. The undertones are, therefore, much stronger and likely to continue in this trend with the likelihood of reflecting the higher raw material costs later on.

Phenobarbital Priced Lower

Manufacturers of phenobarbital cut their schedule prices for Phenobarbital to a basis of $6.50 per pound in lots of 100 pounds or more. This was a reduction of $1.00 per pound from former prices. The reason for the reduction was believed to be sharp competition for business among the domestic producers. Phenobarbital sodium was likewise reduced to the same price as that for phenobarbital.

Japan Wax Easier

Japan wax is easier in undertone with the spot market being on the basis of from 6c to 7c per pound. With stocks more than ample for trading requirements consumers have shown a tendency to shop around before making purchases. As a result of this the tendency to shop before making purchases. As a result of this some factors state that not more than 6½c per pound could be obtained for small lot business.

Japan wax is obtained from the berries of species of sumach tree occurring chiefly in the western provinces of Japan. In recent years the production is said to have averaged about 6,500 tons annually. Kobe is the principal export center. While the United States trade in Japan wax is not specifically indicated in official statistics, imports of "vegetable wax" from Japan, the figures for which follow, are believed largely indicative of the Japan-United States trade in this commodity: 1929, 3,072,000 pounds, $460,000; 1930, 1,824,000 pounds, $226,000; 1931, 2,137,500 pounds, $171,000; 1932 (first 8 months) 1,865,000 pounds, $119,000.

Cod Liver Oil Firm

Seasonal influence have been noted in the cod liver oil market. Prices are firm and unchanged from the prevailing schedules of from $17.00 to $20.00 per barrel as to brand and seller. With the high level of import costs being maintained dealers are generally inclined to be firm in their views of the market for the balance of the larger consuming market just ahead.

Exporters of medicinally prepared cod liver oil filled orders for 19,930 gallons in the first eight months of 1932, which was a 15 per cent. advance over their shipments in the same 1931 months, but this increase in volume of trade does not show up in values, which dropped from $47,484 to $39,624. Imports of cod liver oil in the first two-thirds of 1931 amounted to 1,114,872 gallons, valued at $852,005, against 1932's 774,174 gallons at $542,724.

Exports of cod liver oil from Newfoundland from January 1 to September 23, 1932, amounted to 108,118 Imperial gallons, an increase of about 45 per cent as compared with a year ago.

Tartaric Acid Down

Domestic producers of tartaric acid have lowered their prices to a basis of 21c per pound for barrels. This further reduction merely serves as an indicator of the continuance of sharp competition between sellers in this market.

Bergamot Oil Quiet

Bergamot oil is passing through an exceptionally quiet period. Dealers are believed to be carrying fairly large stocks. Offerings are made quite freely at from $1.80 to $2.00 per pound.

Consul C. Porter Kuykendall, Naples, reports that less bergamot oil was shipped from Italy during August than in July, it is reported. Large stocks remained on hand in early September, with prospects of an extended output in October. The Bergamot Syndicate is said to be encountering obstacles which it has met since its inception. The official price of bergamot quoted by the Syndicate on September 3 was 26.50 lire a Sicilian pound although quantities were available in Naples at 19 lire.

Bois de Rose Scarce

The almost total absence of primary market stocks of Bois de Rose Cayenne has limited the trading in this commodity to a minimum, the uncertainty of obtaining replacements being a constant check to trading. Prices, therefore, are very firm, being prevented from rising to higher levels only by the limited local demand. Brazilian oil is also limited in trading to the small supplies available.

HEYDEN
FINE CHEMICALS

SALICYLATES

Acid Salicylic — Sodium Salicylate

Acetyl Salicylic Acid

Methyl Salicylate — Minor Salicylates

FORMALDEHYDE

PARA FORMALDEHYDE

HEXAMETHYLENETETRAMINE

Benzoate Soda
Benzoic Acid
Benzaldehyde
Benzyl Chloride
Creosote
Creosote Carbonate

Bromides
Silver Salts
Guaiacol
Calcium Guaiacol Sulphonate
Potassium Guaiacol Sulphonate
Glycerophosphates

HEYDEN CHEMICAL CORPORATION
50 UNION SQUARE NEW YORK

180 North Wacker Drive Chicago, Ill.

Factories:

Perth Amboy, N. J. Garfield, N. J.

Peppermint Situation

Peppermint oil continues to be the subject of considerable discussion in the trade. Reports coming from some sections of the country indicate that the new crop is deficient in menthol content. Leading dealers here have confirmed this impression and have stated as an opinion that, taking into consideration the carryover, U. S. P. oil of full menthol content will not be excessive.

Holders of peppermint oil are inclined to be very firm in their ideas concerning prices. Natural oil is quoted slightly higher on spot at from $1.85 to $1.95 per pound, with redistilled offered at from $2.05 to $2.15 per pound. With a moderate demand reported, this condition reflects the ability of primary sources to support their position. Stocks are in the hands of strong sellers and due to the smaller production this year, producers are in a better position to maintain prices. There is very little selling pressure noticeable.

The Department of Commerce reports that the 1932 production of peppermint and spearmint oil in five of the important producing states is estimated at about 59 per cent. of the quantity produced in 1931, which was 69 per cent. of the 1930 production. Since 1929, the acreage has been reduced by nearly one-half and the production decreased by more than 60 per cent. Except that of Michigan, the yields this season have been lower than in 1931. Unsatisfactory prices during the last few years are responsible for the sharp cut in acreage in Michigan and Indiana. The current domestic output of peppermint and spearmint in the five states of Indiana, Ohio, Oregon, and Washington is estimated at 411,000 pounds, as compared with 683,000 in 1931, and 1,103,000 in 1930.

Peppermint oil exports during the first eight months of 1932 aggregated 152,073 pounds, a 14 per cent. increase over the 133,972 pounds shipped in the corresponding 1931 period. The values declined, however, from $274,689 to $257,473, respectively. Total exports of this oil had previously declined from 233,294 pounds ($700,177) for the calendar year 1930 to 229,532 pounds ($438,202) in 1931. Exports of spearmint and other mint oils in the first eight months of 1932 totaled 12,320 pounds worth $15,862.

According to the Instituto Nazionale per L'Esportazione, there are 60 peppermint distilleries in Italian province of Piedmont, their normal annual output averaging 50,000 to 60,000 kilos, in the aggregate.

Clove Oil Competitive

Low prices as a result of keen competition continue to prevail for oil clove. The price range is from 80c to 85c per pound. The spice market continues unchanged with little interest on the part of importers.

Vanilla Bean Developments

Bourbon vanilla beans held without price change during the past month. Although there has been some improvement in consumer request the market in general is still under the influence of excessive supplies. There is said to be available and in prospect from the new crop, not less than 3,000,000 pounds of Bourbon beans. With present consumption on the basis of about 1,500,000 pounds a year, it can readily be seen that this factor alone keeps the market at the prevailing low levels. Spot prices range from 75c to $1.20 per pound as to quality.

Definite efforts are said to be underway to remedy the condition that has kept prices at a level that shows very little profit to anyone concerned in the sale of Bourbon beans. French Colonial officials are reported to be working on a plan to raise the standard of beans for export to a point where only a fractional part of supplies now available will be eligible for shipment. This plan shows every indication of being successful, some factors being of the opinion that it will be put into effect within the next month or two.

As the results on prices would be almost immediate the market will bear close watching. A rise of 50c per pound is looked for in certain quarters.

Mexican beans continue firm at prevailing levels. Recent storms are reported to have destroyed part of the crop so that curers are again paying high prices for green beans. Enough beans are on hand and in prospect, however, to meet any possible demand so that it is generally thought prices are high enough at from $3.00 to $4.00 as to quality.

Vanillin Imports Up

Imports of vanillin entered for consumption, in the United States, increased during the nine months of 1932 to 10,470 pounds as against 1,810 pounds brought in during the same period of 1931. On the other hand, incoming shipments of ethyl vanillin dropped to 2,091 pounds in the period, January-September, 1932, from 3,252 pounds in the nine-month period of 1931.

Eugenol Lower

Eugenol in the aromatic group was sharply reduced during the past month to the basis of from $2.00 to $2.50 per pound. This represents a decline of 25c per pound, the market reflecting the drop in raw material. Undertones at the lower level are not especially firm as considerable unsettlement continues in the material.

Lime Oil Dull

A routine and dwindling demand is characteristic of the market for oil lime. The price range is from $6.50 to $7.00 per pound as to quality. Stocks, although moderate in size, are adequate.

Geranium Oil Firm

Geranium oil prices are firmly maintained in spite of the quiet aspect of the market. This condition reflects the strong statistical position of this item, particularly from the primary market viewpoint. Prices quoted for replacement are said to be but slightly below present spot asking prices. It is generally felt that with a normal interest on the part of consumers an immediate reaction toward higher levels would be experienced.

The better grades of Bourbon oil continue to be quoted at from $4.30 to $4.85 per pound.

Imports of geranium oil into the United States during the period January-September, inclusive, registered a slight gain over receipts in the similar period of 1931, judging from preliminary figures. Imports in the current period totaled 104,600 pounds valued at $332,300 against 101,500 pounds worth $295,400 last year. Geranium oil was received as follows during the first eight months of 1932: From France, 72,193 pounds ($219,843); Algeria and Tunisia 20,649 pounds ($73,166); Netherlands, 3,090 pounds ($13,555); United Kingdom, 2,711 pounds ($11,620); British East Africa, 2,333 pounds ($3,488); Germany, 340 pounds ($1,431).

It is reported that during the period May, 1931, to October 1, 1932, 69,000 kilos of geranium oil were shipped from the island of Reunion. The price per kilo c. i. f. Marseille in early October was 215 francs.

Cedar Wood Oil Down

Cedar wood oil is fractionally lower at from 28c to 30c per pound as to quantity. Supplies of oil are not large but consuming interest has been nil.

Experimental activities toward development of a cedar wood oil industry in Kenya, reported early in 1932, appear to have progressed to commercial significance. Unofficial estimates place 1932 exports of cedar wood oil from Kenya at about $10,000.

Rosemary Steady

Rosemary oil U. S. P. is very steady at prices ranging from 32c to 38c per pound in drums. Available supplies are said to be not in excess of the probable demand for the period immediately ahead. The technical grade of oil, however, is slightly lower in the spot market at from 26c to 28c per pound.

Eucalyptus Easier

Eucalyptus oil is a shade easier owing to competitive influences and a small demand. In drums the price is 21c per pound. With the active season ahead buyers will find the market well supplied at attractive prices.

Exchange
BRAND

CITRIC ACID U. S. P.

"MADE FROM AMERICAN LEMONS"

By Exchange Lemon Products Company, Corona, Calif.

CRYSTALS -- GRANULAR
POWDERED

IMMEDIATE SHIPMENT IN

KEGS -- BARRELS -- CARLOADS

From NEW YORK, CHICAGO, PHILADELPHIA, ST. LOUIS

DISTRIBUTED EAST OF THE ROCKIES BY

Mallinckrodt CHEMICAL WORKS
St. Louis—Philadelphia—New York

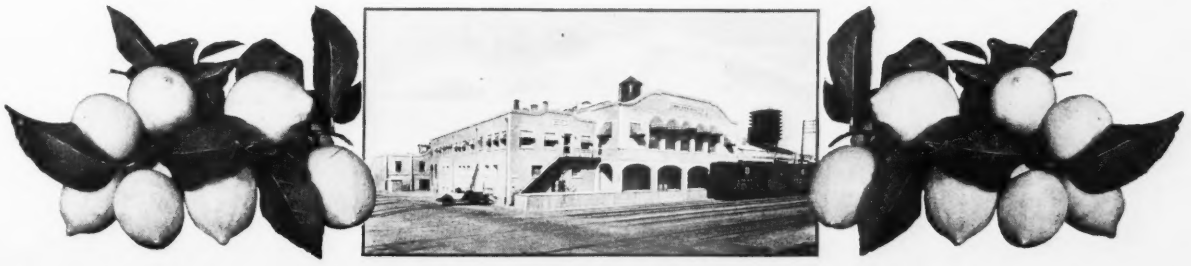
J. T. BAKER CHEMICAL COMPANY
Phillipsburg, New Jersey

DODGE & OLCOTT COMPANY
180 Varick Street
New York City

NEW YORK QUININE & CHEMICAL WORKS
101 North 11th Street
Brooklyn, New York

Pacific Coast Served By

Products Department — CALIFORNIA FRUIT GROWERS EXCHANGE — Ontario, California



Camphor Oils Lower

Brown camphor oil derivatives are sharply lower in the spot market, representing one of the outstanding developments during the past month. Artificial sassafras oil is quoted in drums at 16½c per pound and in cans at 18½c per pound. This follows out the general trend in these oils established a month ago when reductions also were instituted. The market is still weak at the lower levels and subject to some shading from the above prices on a firm bid.

Safrol is now available at a range of from 22c to 24c per pound as to quantity. These prices represent a decline of 4c per pound.

Although trading is restricted, the general downward trend is attributed to general economic conditions in Japan. Sharp reductions have been made in replacement costs of raw material.

The sharp decline in Japanese exchange made possible equally sharp reductions in the spot price of sassafrassy oil. Competition is said to have increased with the decline in costs establishing the market on the basis of from 10½c to 12½c per pound as to quantity. White oil remained unchanged.

Oil Cananga Scarce

Oil cananga is very scarce and constantly tending toward higher levels. This oil represents one of the outstanding strong points in the essential oil market. Native oil is now priced at from $1.75 to $1.90 per pound, with rectified up to the basis of from $2.05 to $2.20 per pound. Although demand has shown some gains, the strength is due to the higher replacement market. Very little oil is offered for shipment and spot stocks are at an exceptionally ebb.

Oil Wormseed Down

Although oil wormseed is in a strong statistical position, the commodity having been underproduced this year as a result of the low prices that have prevailed for some time, the market inactivity has resulted in a further reduction. Prices are now generally on the basis of from $1.90 to $2.20 per pound, representing new low ground for the movement. With only small quantities of oil offered from the country, however, local factors believe that higher prices will prevail on the slightest improvement in demand.

Pennyroyal Strong

Imported pennyroyal continues in a very strong statistical position. Reports from Spain indicate that the crop has been a complete failure. At any rate, very little oil is being offered for shipment. It is said that the poor demand at present alone prevents the market from rising considerably above the current spot of $1.35 per pound.

Oil Anise Strong

Due to an increase in the demand for oil anise, both buyers and sellers are watching the market closely. Spot quotations have not been changed, technical oil still being offered at from 30c to 32c per pound, with the U. S. P. quality at from 33c to 34c per pound, but in view of the fact that spot supplies are not over large and the primary market in a firm position, leading dealers are not inclined to move oil at anything but the maximum of official quotations.

Cassia Oil Easy

Oil cassia continues in the downward movement established some months back with further recessions of 2c per pound being made by local dealers during the past month. This commodity is now on the basis of from 85c to 90c per pound as to quantity. Business is made up of small quantities only but the future outlook is more satisfactory from the standpoint of dealers as these prices are regarded as very low.

Oil Sandalwood Still Competitive

Competition between producers of sandalwood oil continues active. Mysore label material is offered at $6.50 per pound. Deliveries to pharmaceutical houses was reported as good. U. S. P. goods sold under other labels was to be had at as low as $5.50 per pound. As the movement into consuming channels has been characterized as satisfactory it is strictly the competitive factor that has resulted in the recent price reductions.

Anethol Lower

Anethol is down 5c per pound to the basis of from 95c to $1.10 per pound. The reduction was influenced by light demand and the competitive factor as between local sellers.

Ylang Ylang Down Sharply

Under the influence of lower replacement costs and increased competition, Bourbon ylang ylang oil was reduced rather sharply. Number 1 oil in 10 lb. tins, high quality, is offered at from $4.75 to $5.00 per pound, with the Number 2 at from $4.25 to $4.50 per pound. The Manila grade remains firm at from $22.00 to $27.00, as to quality. Demand in all respects is routine.

Orris Root Easy

With very little business passing in orris root primary market holders seem more anxious to move stocks. Slightly lower cables are reaching this market although no outstanding price movements are noted with the exception that powdered Verona is fractionally lower at from 10½c to 11c per pound, spot.

Gum Arabic Quiet

Business in gum arabic is along quiet lines although the past month failed to show any price changes. Sales of amber sorts were made at from 6¼c to 6½c per pound. Stocks on spot are said to be in line with the character of present demand although a considerable carryover is reported to exist in the primary market. These stocks are in the hands of many small speculators in the producing country whose intention evidently is to await a more favorable market before disposing of them. This has resulted in some stability, although with the new crop season approaching there does not appear to be any likelihood of a higher market for some time.

An unusual feature of the gum arabic industry is the season's gum crop of the Kassala Province, amounting to 84,000 cantars, a record output. Last year's production by this Province of 30,700 was considered a favorable yield. During July, 1932, 10,542 cantars arrived at the gum markets in Kordofan, and in El Obeid 6,950 cantars. Imports of gum arabic into the United States during the first nine months of 1932 amounted to 3,711,700 pounds valued at $157,400 compared with 6,430,300 pounds worth $484,500 in the corresponding period of 1931.

The total arrivals of gum arabic in June, 1932, at all the gum markets in the Kordofan Province amounted to 20,597 cantars, with 14,556 cantars at El Obeid. Arrivals, consisting mainly of rain-damaged gum, continued to decrease, bringing lower returns, while the few arrivals of good quality gained in value. In view, however, of the poor demand and the accumulated stocks in the local market, quotations to markets abroad remained unchanged. Exports during June totaled 685 tons, compared with 1,391 for June, 1931. Of the former quantity the United States took 115 tons.

Gamboge Gum Down Sharply

As a result of keen competition among leading importers, the price of gum gamboge has been reduced sharply to the basis of from 45c to 50c per pound. Powder is unchanged at from 65c to 70c a pound with the possibility of shading these figures. Current prices are said to be too close to import costs so that a slight improvement in trade would result in a reaction.

Candelilla Wax Shaded

With trade in candelilla wax distinctly routine leading factors have shaded prices fractionally. Spot quotations are now on the basis of from 12c to 13c per pound.

Oil lemongrass native is lower at from 42c to 45c per pound. This was the result of a decline in shipment quotations of 1c per pound and more generous offerings from primary market sources.

RESIDUE

One method of determining nonvolatile organic and mineral impurities in alcohol is to evaporate a given quantity and weigh the residue. Pure alcohol should not contain more than .003% grams per 100 C.C. of residue. This balance used by Rossville, is accurate to 1/10 of a milligram, or one four millionth of a pound. It is used to determine residue and assure uniform Rossville purity.

UNIFORM ALCOHOL

NATURALLY, all alcohol is not alike—there are many kinds and grades—alcohol made from molasses is used for some purposes, alcohol made from grain is used for other purposes, and for the most exacting uses is made according to private specifications. Purity and clarity are necessary and should be uniform. A grade known by a definite brand name, or a specification alcohol, should be and can be uniform. Because sufficient care is taken Rossville alcohol is held to certain standards. It *is* uniform.

Three important factors assure you this uniformity.

1. Rossville alcohol of all grades is constantly tested, checked, and double-checked by a dozen tests to verify, maintain and guarantee consistent quality.
2. Rossville production facilities include ample capital resources, strategic plant and warehousing locations, ultra modern manufacturing equipment.
3. Rossville distilling experience covers a period of 84 years, and at all stages of this history the Rossville product has enjoyed the reputation for maximum quality just as it does today.

Atlanta
Baltimore
Buffalo
Boston
Chicago
Cincinnati
Cleveland
Detroit
Grand Rapids
Kansas City, Mo.
Louisville
Newark
New York
Philadelphia
Pittsburg
St. Louis
St. Paul
San Francisco

Rossville
THE SPIRIT OF THE NATION

ROSSVILLE COMMERCIAL ALCOHOL CORPORATION
Lawrenceburg, Indiana — New York, N. Y.

Agar Decline Checked

The downward trend in agar, noted for a long time now, seems to have been checked at least temporarily. The market continues, however, to be influenced by large spot supplies and weakness in the primary market.

During the first seven months of 1931 the United States was the largest individual consumer of Japanese agar agar, taking 464,240 pounds, or 20 per cent. of the total, while during the same period of the current year the United States took only 322,018 pounds, or 16 per cent.

Stocks of agar agar in Japan, with the exception of No. 1 Kobe quality, were abundant on August 24, due principally to decreased exports to Hong Kong and the United States. There was no carry-over from the 1931-32 crop, which was in course of preparation for the market during the period from December, 1931, to February, 1932. Despite the decline of the yen the price tendency was downward from January to mid-August of this year. Prices rose slightly in mid-August, owing to the sharp drop of the yen, but were offset, however, by the continued decline of exchange. The scarcity of Kobe No. 1 quality was due to the unusually warm weather which prevailed during the last drying season December, 1931 to February, 1932. The output of Kobe quality agar agar, grades No. 1 to No. 3, inclusive, during the 1931-32 season totaled 1,820,000 pounds while the output of Yokohama quality was 585,000 pounds.

Total exports of agar from Japan during the first seven months of 1932 amounted to 1,983,000 pounds valued at $657,000, a decrease of fifteen per cent. or 350,500 pounds in volume, and $825,000 or fifty-five per cent. in value, when compared with similar exports during the same period of 1931, amounting to 2,333,500 pounds valued at $1,482,000.

Senega Root Easier

Senega root has eased off from the high levels reached during the drastic advance of two months ago when reports reached this market regarding the small amount of collections this year. It is the opinion of importers that the advance had been too rapid in view of the current demand for the item. Spot quotations are now on the basis of from 37c to 42c per pound as to quantity.

Digitalis Strong

Although the spot price of digitalis leaves have not been advanced above the prevailing market of from 11c to 12c per pound, the general tone of the market is such that the necessity to replace stocks would undoubtedly result in a rise. The crop in Europe this year has been conservative and sellers were inclined to take a much firmer view of the market, anticipating possible advances at the source of supply.

Psyllium Seed Down Again

French psyllium seed is again lower in the spot market, mainly as a result of large stocks and a prolonged period of inactivety. French seed is officially quoted at from 11c to 14c per pound but better than these prices can undoubtedly be done on a firm order of size as most holders are anxious to move stocks.

Stocks of Indian seed are also reported as large. This grade of seed is declined further now being offered at from 5c to 5½c per pound. The primary market is weak.

The Spanish psyllium output is estimated to have more than doubled in the past two years. The production in 1932 was stated unofficially to be about 118,000 kilos, compared with 66,000 kilos in 1931. Of the current crop Andalucia was accredited with 125,000 kilos, Levante with 14,000, and Mallorca 9,000. Consumption of psyllium seed in Spain is said to be increasing.

The cultivation of Plantago psyllium in Greece, which as previously reported is in the hands of one grower, is being continued in 1932, approximately 1,000 acres having been planted this season according to the grower. The yield of the 1931 plantings was smaller than was anticipated, and it is understood that much of the seed already produced is being retained for further cultivation.

Chamomiles Point Upward

Indications from abroad point to higher prices for chamomile flowers. Stocks are moderate and in firm hands who have shown a tendency to hold out for higher prices. It is said that more money can be obtained in European market for flowers than in this country so that shippers have shown little desire to export. The spot market is from 14c to 15c per pound with every indication that a resumption of buyer interest would raise these prices almost immediately.

Arnica Flowers Shaded

Arnica flowers showed a 1c per pound increase during the past month, now being offered at from 9c to 10c per pound. This development was in keeping with the emphasis placed on reduced production abroad and higher prices which sellers have been able to obtain. This is one of the items in the botanical field due for an advance once the demand gets underway.

Ergot Down to 35c

Spanish ergot is lower at 35c per pound. Some shipments of new crop have arrived here and it is said offerings are of ample size this year. A low replacement market prevails.

Pyrethrum Firm

Japanese pyrethrum flowers present a particularly firm undertone in the spot market, reflecting the very satisfactory business done in this item and the continued receipt of reports of a firm primary market. Considerable interest is being shown in forward positions.

During August, 1932, the United States imported 1,052,342 pounds of pyrethrum flowers, valued at $111,416, of which Japan supplied 887,680 pounds worth $96,106. Receipts of this product during the first eight months of 1932 totaled 7,184,988 pounds valued at $813,133, as compared with 2,627,856 pounds valued at $299,016 in the corresponding period of 1931.

Heavy receipts of pyrethrum flowers during September totaling 1,375,078 pounds valued at $144,322 place that item in conspicuous contrast with other crude botanical products, states the Department of Commerce. Pyrethrum imports during the first nine months of 1932 aggregated 8,560,066 pounds valued at $957,455 compared with 2,826,326 pounds valued at $323,197 in the similar 1931 period.

Celery Seed Reduced

Notwithstanding the fact that spot stocks of celery seed are small and difficulty is still being experienced in replacing the article because of quality to pass Department of Agriculture, local dealers have reduced prices 3c per pound to the basis of from 42c to 43c per pound. Lack of interest in offerings predominates the situation. During the week ending October 26, the Department held up six lots (124 bags).

Blue Malva Down

Although blue malva flowers showed a reaction during the past month, this development was due entirely to the small consumer request. The true position of this item is not reflected in the spot market decline to the basis of from 55c to 60c per pound, as the statistical position continues to be very firm in keeping with many other botanicals grown in Central Europe. With this item underproduced, the primary market is very strong, replacements being obtainable only at higher prices abroad. With small stocks both on spot and in Europe demand in any volume would push prices up sharply.

Chinese Flies Firmer

Due to the total absence of supplies of Russian cantharides, consumers are gradually turning to Chinese flies. As a result the Chinese material is very firm at prices reached during the recent advance. Cases, whole flies are quoted at 70c to 75c per pound, with the powdered grade at from 80c to 90c per pound as to quantity.

Sun Bleached

SNOWFLAKE BEESWAX

Additional acreage for sun bleaching of our beeswax is now in full production at Morris County, New Jersey, while our long-established sun-plant at Elmsford continues to make deliveries of the brand that made us famous. Stocks are always on hand at Chicago, St. Louis, Paris, Tennessee, Los Angeles and San Francisco.

Beeswax Bleacheries and Refineries in Morris County, New Jersey, and Elmsford, New York.

FRANK B. TRACY
102 N. Wells Bldg.
Chicago

C. L. IORNS
619 Clark Ave.
St. Louis, Mo.

MELVIN A. ISAACS & CO.
486 California St.
San Francisco, Cal.

E. A. BROMUND CO.

(Est. 1880)

258 Broadway **New York City**

POWCO BRAND
REG. U.S. PAT. OFF.

Neutral Powdered Soaps

Laboratory Controlled

YOU CAN'T AFFORD TO GUESS when buying QUINCE SEED

You cannot buy wisely if you do not check:—

(1) Mucilaginous content.
(2) Color of mucilage after extraction.
(3) Freedom from adulteration, dirt, and other inert material and bugs.

You must have an intelligent test basis upon which to buy.

We developed a simple practical test basis for your protection.

Every lot of Quince Seed is tested in our own laboratory under exacting conditions and must measure up to a minimum standard of mucilaginous content.

It is easy for you to prove that this tested Seed provides you the greatest value per dollar you pay out.

Send for samples and compare

JOHN POWELL & CO., INC.

114 East 32nd Street **New York, N. Y.**

Grass-Green for Protection

(*Continued from page 426*)

when the seed is ground up or ruptured. The products of this decomposition are therefore the same products as those used in building up the plant and its fruit. There is a belief that these scientific facts are hooked up with the protective effects of grass green coverings upon foods, drugs, fats and oils, cosmetics, perfumes and flavors.

The ultra-violet rays of light cause much trouble in injuring many of these products. The infra-red rays, at the other end of the spectrum, are not so injurious. From the standpoint of energy or intensity, it takes less ultra-violet rays by two-thirds to produce rancidity than it does infra-red. Natural sunlight is very strong in red, but weaker in ultra-violet, but the latter is more powerful for causing rancidity. When rays of light are shut out by grass-green covering, the latter absorbs all the ultra-violet rays, as well as the orange, yellow, red, blue and purple rays, and only lets the limited green rays through.

Deterioration of drugs, cosmetics and other products from light does not come alone from exposure to direct rays of the sun. Even sun light reaching such products in a shady location, such as the interior of a factory or a store or house, causes damage from rancidity.

Mr. Coe states that chemicals tending to prevent or delay oxidation, such as pyrogallol, hydroquinone and substituted hydroxylamines, if added to oil-bearing products may prevent or delay rancidity, but their use may be, in many instances, considered objectionable because of their effect upon taste, color, flavor, odor, or chemical composition and reaction of the particular drug, pharmaceutical, cosmetic or flavoring product concerned. However, it is suggested that it might be possible to hit upon some antioxidants that might be used practically to protect products from rancidity without injuring or altering their characteristics. In such cases such antioxidants might be used instead of or in addition to the green, black, or foil coverings, for the same general protective purpose.

Hundreds of experiments have been made in the Department of Agriculture to determine the effect of light upon oil-bearing products. Most have had to do with foods, as heretofore indicated. The surface of the field has scarcely been scratched. Much more work remains to be done. The experiments are continuing during the winter.

Food, drug and cosmetic interests are watching and awaiting results. Inquiries reach the Department from all over the country and from foreign parts about the progress of its experiments. Paper manufacturers are interested, as shown by their inquiries. Glass container interests are concerned. It is said that glass, paper, cloth and cellulose containers or covering materials of the proper green shade may be obtained on the market. Use of these coverings is said to be on the increase.

Impregnated Powders

(*Continued from page 427*)

The boric acid may be easily and copiously dissolved in alcohol. However alcohol is excluded due to cost. Boric acid will dissolve just about as easily in glycerin, but glycerin introduces difficulties due to its hygroscopic and other properties. Most advantageous method is to dissolve boric acid by boiling in water, that is 0.1 part of boric acid in 1.5 parts of water. This solution is then slowly added to 10 parts of talc, heated to about 100° C., in an operating mixing machine. After mixing for ten minutes, excess water is removed by evaporation at 70° to 150° C., in drying chamber. The powder is then ground and screened. The powder impregnated with boric acid, is constituted in its smallest units in such a manner, that each particle of talc is coated on the surface with colloidal particles of boric acid.

Process of dissolving in hot water and preliminary heating of powder base are not necessary when easily soluble substances are being incorporated. Preliminary heating of powder base is necessary with boric acid since boric acid would be precipitated in crystalline form from cooled solution.

Impregnation is complete, when solution wets and surrounds all of the powder base. Even partial impregnation is superior to a well-prepared dry mixture. Partial impregnation takes place, when too little solution is present in comparison with total amount of powder, or when only part of powder base is completely impregnated and then mixed with remainder of powder base.

Impregnated powder acts as follows: In the first place the added substance precipitates, on evaporation of the solvent, in a more or less dense film (dependent in each case on the percentage proportion of the added substance) in colloidal form on the powder base. The active ingredient can therefore effect its action immediately after the powder has been applied, since it is not retarded by the development of talc. Action of powder is gentle, because active film is very fine and because only part of precipitate is set free at all times due to absorbent and adhesive powers of kaolin or talc. Result is that action is long enduring and uniform.

Work that must be expended in impregnation is certainly not as great as when trituration must be carried out in addition to mixing. Trituration is always necessary in a mild acting powder.

When intensive trituration is carried out on thickly viscous or oily substances, such as lanolin, petrolatum, mineral oil, in incorporating them with powder base, then particles of base are partially coated with these substances. A powder, in coating of which a solution of aforementioned substances in acetone is used, is considerably finer and more easily worked up. A direct solution is not required. An aqueous emulsion may be used with satisfactory results. Furthermore, a

FLAG BRAND

WHITE OILS

Refined by
OELWERKE JULIUS SCHINDLER
Hamburg

Photo by Hamburger Luftbild, G. M. B. H.

U. S. P. MEDICINAL: Genuine Russian Imported White Oils with viscosity 335 and lower.

COLD CREAM OILS: All grades for cosmetic purposes.

TECHNICAL OILS: Viscosity range 75-400, for Soap Stock Oils, Textile Oils, White Oils for mineral oil emulsions.

Stocks carried in New York and Brooklyn Warehouses

Sole U. S. Representatives:

S. SCHWABACHER & CO., Inc.
59 PEARL STREET NEW YORK, N. Y.
Telephone: WHitehall 4-5367

CAMPHOR, SYNTHETIC
MENTHOL SYNTHETIC CRYSTALS
THYMOL, U. S. P. PRIME WHITE CRYSTALS

UREA C. P. and Technical
TERPIN HYDRATE U. S. P.
URETHANE U. S. P.

Products of SCHERING-KAHLBAUM, A. G., Berlin

Imported exclusively by:

SHERKA CHEMICAL COMPANY, Inc.
75 West Street New York, N. Y.
Tel: BOwling Green 9-7482

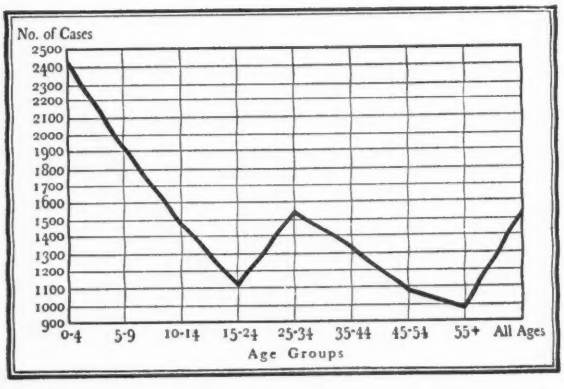
cream may be prepared by using an absorption base which is rendered fluid by required amount of water. It is advisable to preserve the emulsion by the addition of esters of oxybenzoic acid, since decomposition of emulsifying agent takes place due to increase of surface area in powder. The emulsifying agent is quite stable in other respects. Other valuable substances that may be added include cholesterin, spermaceti and beeswax. These may be compounded with powder base to give a highly active product by using them in emulsified form instead of solution.

Other substances for impregnation of powder base for various purposes include tannin, aluminum lactate, witch hazel extract, chamomile extract, tincture of benzoin, Peru balsam tincture, sulphur, lactic acid, tartaric acid, quinosol and the like.

Substances used as powder base for all kinds of impregnations, include kaolin and talc which give best results. Substances not suitable are those that swell up, such as different starches, flour, also substances which react with acids, such as zinc oxide, magnesium carbonate, calcium carbonate, furthermore also such greasy substances as spermaceti or magnesium stearate. If it is necessary to compound such substances with powder base, then the latter, that is talc or kaolin, is first impregnated with active ingredient, and then after impregnated product has been dried, pulverized and screened, the other substances are admixed with it.

An impregnation practised up to the present according to the positive method, is mixing and trituration of dissolved vegetable or anilin colors with powder base. Mere mixing of dry soluble colors with powder base—even when it has been followed with hour-long, extremely vigorous trituration—has always resulted in streaky effects when powder is used. Application of solution of lanolin in acetone to compounding of powdered product has also been practised. Extremely thorough impregnation process must always find advantageous use in the preparation of the better grades of powders.

COLDS AND AGE



Colds are most frequent in children and active young people shows this chart prepared by U. S. Public Health Service

Editor's Correspondence

Editor, Chicago
Drug and Cosmetic Industry,
Sir:

I have just finished reading the editorial in your August issue which has been sent to me. As an active worker in the interests of the independent retail druggist I must say that you have indicated clearly that it is up to the retailers to make a definite move toward getting the manufacturers to agree to some sort of fair price legislation. Might I ask if you have any definite plan in mind? When I am in New York, which will be within the next month, I shall come in to see you so that we might talk this matter over.

In the meantime I would appreciate hearing any suggestions you might have. I must say that your policies appear to be very fair to the retail trade although your magazine is supposed to be published in the interests of the manufacturer rather than of the retailer.

I believe I recall that you have in the past expressed disapproval of the Capper-Lelly Bill. If this is so, might I ask what plan you do approve?

AN INTERESTED RETAILER.

Editor's Note: We have answered all who wonder as to our policies and as to what prompted us to write the lead editorial in the August issue to which the gentleman refers, in the lead editorial in this issue appearing on page 407, and entitled "We Will Help."

Editor, Chicago
Drug & Cosmetic Industry,
Sir:

Unfortunately left the last issue of THE DRUG AND COSMETIC INDUSTRY on the train one night when I went home intending to read that number during the evening. Will you kindly supply us with another copy.

JOSEPH R. NOEL.

Editor, Philadelphia.
Drug & Cosmetic Industry,
Sir:

We have been subscribers to DRUG MARKETS for many years and have read it and its successor, DRUG AND COSMETIC INDUSTRY, with increasing interest as the years rolled by.

J. P. HARMER.

Editor, Kansas City, Mo.
Drug & Cosmetic Industry,
Sir:

Will it be possible for me to obtain back issues of your magazine? Only recently I discovered your magazine and have consulted back issues in the library. I find that the issues prior to the start of my subscription contain much valuable information which I am desirous of having in my office for reference. Let me know how far back you can let me have issues, and what the charge is.

T. MAYNARD ANSTER.

Editor, Cincinnati, Ohio
Drug & Cosmetic Industry,
Sir:

We wish to compliment you upon the many high class articles which appear each month in your publication. It is one of the most comprehensive magazines of its kind we have ever come in contact with.

O. D. RUSSELL.

Editor, Paterson, N. J.
Drug & Cosmetic Industry,
Sir:

Your publication is one of the few that improves with every issue.

A. R. BEAMON.

BOTANICAL PRODUCTS

(DRUGS AND ALLIED MATERIALS)

Over 800 Varieties

The largest stocks of Botanical products in the world

Laboratory Controlled Quality
assures the Manufacturer in every line the highest quality material

Producers of EVENIZED highest *quality Powders of:*
TRAGACANTH
KARAYA **ARABIC**

Our NEW PRICE LIST JUST ISSUED
comprising over 800 Crude Botanical *items is available upon request*

S. B. Penick & Company

132 Nassau Street **NEW YORK, N. Y.**

Why so many leading cold-cream manufacturers USE

BEEHIVE BRAND BEESWAX

First, because Beehive Brand Beeswax is pure—the finest that money can buy. In many cases, a smaller amount is used in the cream than is required of ordinary beeswax, and with better results.

Our own buyers select the finest grade of crude beeswax. It is critically examined at the source and again carefully tested for purity and quality by our chemists. Beehive Brand is then sun-and-air bleached—a method that is slower and more costly but infinitely better than ordinary chemical bleaching. This work is done by and under the direction of veterans, many with more than 45 years of service.

Specify Beehive Brand for your next order of beeswax.

WILL & BAUMER CANDLE CO., Inc.
Syracuse, New York Est. 1855

SPERMACETI CERESINE
GLYCERINE STEARIC ACID RED OIL

BILE SALTS
CHOLESTERIN
IRON PEPTONATE

THE WILSON LABORATORIES

4221 So. Western Ave., Chicago, Ill.

also

816 First Ave., New York
24 Oregon Ave., Philadelphia
869 Folsom St., San Francisco
1220 W. Pico St., Los Angeles
826 Clark Ave., St. Louis

Pure Medicinal Chemicals

Ammonium Chloride U.S.P.
Ammonium Sulphate Purified

Iron Citrate U.S.P.
Iron & Ammonium Citrate U.S.P. Brown Scales
Iron & Ammonium Citrate U.S.P. Brown Pearls
Iron & Ammonium Citrate Green Scales
Iron & Ammonium Citrate Green Pearls
Iron Sulphate (Ferrous) U.S.P. Crystal

Oxyquinoline Citrate
Oxyquinoline Sulphate

Sodium Carbonate C.P. Anhydrous
Sodium Chloride C.P.
Sodium Phosphate Dibasic U.S.P. Anhydrous
Sodium Phosphate U.S.P. Granular
Sodium Sulphate Anhydrous Purified
Sodium Citrate U.S.P. X Granular

Schuylkill Chemical Co.

2346-2354 Sedgley Avenue, Philadelphia

Distribution's Part in the Depression

(*Continued from page 434*)

month; can have anything "sent out on approval" and return it after we've had it a week or a month; can return any purchase for any or no cause, for credit or refund; can attend free store-lectures, concerts, pipe-organ recitals, style-shows, free lessons in cookery, beauty-culture, bridge, embroidery, dressmaking, lamp-shade-making or what-would-you?

All this spells modern "retail service" and for it we pay the store thirty to forty cents out of the average dollar we spend there as price-margin or the store's gross profit, out of which to pay its expenses and—sometimes—a net profit. Our mothers, out of their dollar, paid the store just half this amount, say fifteen cents, yet a larger percentage of merchants prospered in those days than now. Here is one of Distribution's doubled costs.

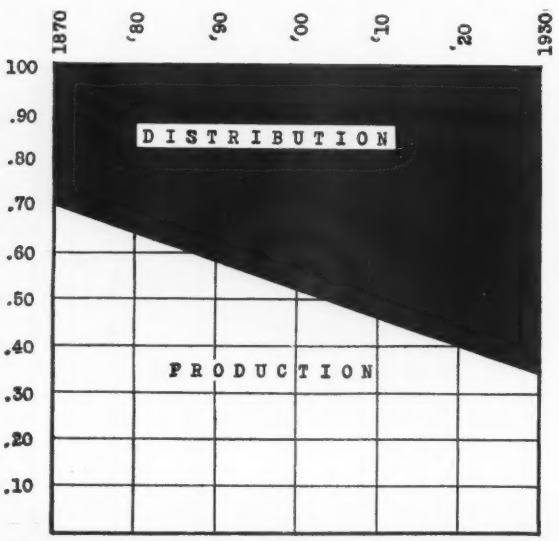
In those days the wholesaler kept a big store, displaying all his goods or samples of them and retailers came twice or four times a year and bought what they needed to fill their shelves and stock-rooms, cellars or attics. Now (until lately) wholesaler's and manufacturers' salesmen swarm over the country in trains, motor-coaches, interurban trolleys and their own sedans, with their sample-cases or trunks, perpetually peddling small quantities of goods to retail merchants. A majority of their merchandise-orders have become so small that a large, growing number of wholesalers have found two-thirds of their retailers to be unprofitable customers and are cutting them out, not calling upon them. For most of our storekeepers have become like babies who must be fed with a spoon, waited upon constantly, to keep up their stocks. Here is another doubled Distribution cost.

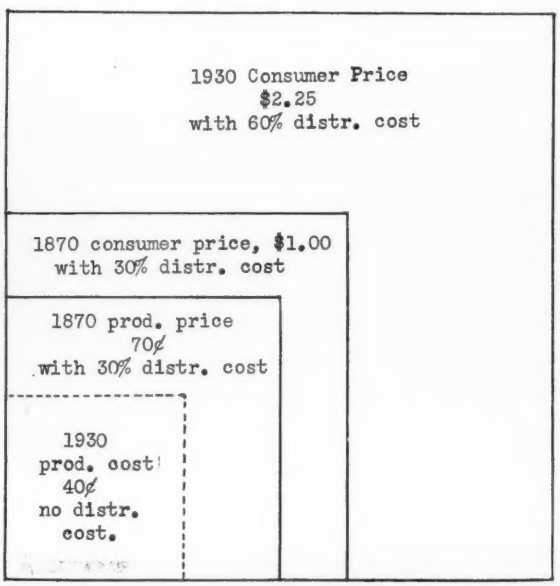
Since 1870 a new, nation-wide industry has developed, manufacturing and selling a purely psychological product, *state of mind*, inducing in possibly potential customers the desire to buy. This we call advertising. Its yearly cost to the nation now exceeds one-and-one-half billion dollars, or more than two dollars per acre for every acre of farm land in the country, more than twelve dollars per person of our population, infants, children, illiterates, inmates of asylums, prisons and prison-farms. Here is another added Distribution cost, because of unwisely used advertising.

By 1910 the nation's greatest industrial problem became that of selling the Product. As early as then Production's efficiency had so outstripped that of Distribution that goods could not be sold as fast as they were produced, in spite of a halving of wholesale production cost. Distribution's high costs made the Consumer Price too high to permit normal Consumption. Under a normally-balanced scheme of things this could not have happened. Greater and cheaper output of Product, creating and gratifying an endlessly-growing variety of consumer-desires, would have found an endlessly-growing market if Distribution's cost had been correspondingly reduced. Granted, some innovations, the kodak, the automobile, the moisture-proof food package, the dry breakfast-foods, were at first too imperfect or too costly and had to wait for an incipient, inherent desire to grow into a broad demand, with much money spent in its stimulation. These improvements could and should have paid their way, have expanded their use more slowly, to keep pace with growing desire. As a matter of fact, however, the cost of forcing real improvements upon an unready age of Consumers has added but little to Distribution's growing cost.

Then what is the chief cause of this doubling of distributive cost? What causes department stores and retailing generally to offer countless gratuitous "services" and compels all retailers to subtract a doubled amount from the consumer-dollar? What has forced these added selling-services and costs upon wholesalers?

The chief cause is the uncontrolled increase in the number of traders and of trading businesses and their





COD LIVER OIL

A-A BRAND

Finest Medicinal Quality

The recognized standard, known for its high vitamin contents. Guaranteed the finest Norwegian non-freezing medicinal cod liver oil.

POULTRY GRADES

For animal and poultry feeding
Highest vitamin potency
Packed in barrels or drums

Write us for quotations

For Spot Delivery or direct shipment from Norway

BRÖDR. AARSAETHER A/S
AALESUND, NORWAY

P. R. DREYER Inc.

Sole Representative in the United States

12 EAST 12th STREET
NEW YORK, N. Y.

CHICAGO PHILADELPHIA KANSAS CITY
BALTIMORE ST. LOUIS CINCINNATI
LOS ANGELES SAN FRANCISCO DETROIT

THREE ELEPHANT
BORAX
BORIC ACID

Reg. U. S. Pat. Off.

Stocks carried by the following distributors:

A. Daigger & Co., Chicago, Ill.
Detroit Soda Products Co., Wyandotte, Mich.
Arnold, Hoffman & Co., Providence, R. I. Philadelphia, Pa.
Thompson Hayward Chemical Company, Kansas City, Mo. St. Louis, Mo.
Marble Nye Co., Boston, Mass. Worcester, Mass.
Innis, Speiden & Co., New York, N. Y.

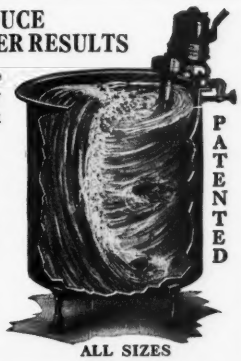
In Canada
St. Lawrence Trading Company, Ltd.
Montreal, Toronto and Vancouver

American Potash & Chem. Corp.
WOOLWORTH BUILDING NEW YORK CITY

LIGHTNIN PORTABLE MIXERS

PRODUCE BETTER RESULTS

Clamp on any Tank



PATENTED

Mixing fluids quickly, thoroughly and economically is an important process. LIGHTNIN Mixers do the job better and save money.

Write or Catalog

MIXING EQUIPMENT CO., Inc.
1060 Garson Ave., Rochester, N. Y.
New York, N. Y. Chicago, Ill.

ALL SIZES

PSYLLIUM

Its Cultivation

Therapeutic Qualities

Commercial Future

Send for "Psyllium Seed–The Latest Laxative"

By Dr. J. F. Montague, New York

Mail this coupon with $2 to

Drug Markets, Inc., 101 W. 31 Street, New York City

CRYSALBA

THE NEW DENTIFRICE BASE

Send for generous sample and technical data on this new base developed by the world's largest dentifrice base producers.

THE ILIFF-BRUFF CHEMICAL COMPANY
DIVISION OF THE SWANN CORPORATION
Birmingham New York
St. Louis Cincinnati

incompetence to do more than hand out wanted goods. Since 1870 the number of our wage-earners employed in distributive occupations has grown twice as rapidly as those in Production industries. Considering Distribution to comprise wholesale and retail establishments, commission agents, commodity-brokers and railway and steamship employees, with motor-transportation in later decades, and Production to represent agriculture, manufacturing and mechanical businesses, fisheries, mines and forestry, here are the proportions, from census figures:

In 1870 each Distributor was handing on the products of seven Producers and supplying thirty-one consumers or members of the total population. By 1930 each Distributor was handing on the product of only two-and-one-half producers and was supplying less than thirteen consumers, representing less than five wage-earners. It is obvious that this abnormal increase was chiefly manifested in retailing, because by the Census of Distribution of 1930 we learn that we had more than 1,500,000 stores. This means a retail store for every eighty people of our population, every sixteen families, every thirty-six wage-earners. It is equally obvious that an overwhelming majority of these were very small stores. Most food retailers, of whom we have 400,000, are in this class, subsisting during their brief stay in business by feeding their families and themselves from the store's shelves at wholesale cost and getting free labor from their wives and children. Yet these shops absorb great sales-volume by their great number, thus increasing the expense of other larger stores, because all expense is relative, governed by sales-volume. A swarm of locusts will double the farmer's labor and cost.

The small size, financial weakness and general incompetence of a million needless stores has doubled the expense of both wholesalers and worthy, larger retailers. The costly gratuitous "services" of the latter are merely frantic efforts to get and hold patronage. Department stores do much less than one hour of normal, active business per day and their sales-clerks must be poorly paid but very costly, because they must spend four-fifths of their working hours in idleness, "waiting for trade." This percentage of idle time undoubtedly prevails throughout the whole field of retailing, except in a few traffic-congested centers in very large cities.

So we are in a new age of Distribution, in which Production's multiplied efficiency and saving of labor, instead of resulting in multiplied Consumption through reduced Consumer Price, has penalized Production itself, together with our whole people, depriving its workers of employment and buying-power. In which a needless portion of Price nullifies the law of Supply and demand; in which Production must actually give the whole of the consumer-dollar to pay for Distribution's supposedly greater service. Only incalculable inflation of Price and Credit, with its accompanying inflation of currency-volume, is providing advances from time to time sufficient to keep the wheels of Production turning intermittently. And this inflation must ever breed more inflation, for it can never be paid off. It is a constantly increasing over-draft on the future, continuously borrowing from future Price and Product at an ever-increasing rate.

There are those who say that modern Distribution is worth all its increased cost; that modern Production's great output could not be sold without Distributions' great size and costly high-pressure selling-efforts. This begs the question facing the American nation:

"How can Production be saved except by reducing the cost-share of Distribution, since instead of serving Production, it is now destroying it, while consuming itself?"

A Packaging Contrast

(*Continued from page 411*)

ual changes are being made, very carefully and cautiously. Castoria deferred to the popular demand for containers easy to use, by substituting a screw cap for a flush driven cork. So did Dr. Kings New Discovery. Sloan's Liniment and others. And many of the older packages have slowly and cautiously been modernized through the gradual elimination of excessive copy and the improvement of label and carton stock.

Although we realize the difficulty of changing a long established proprietary package especially when it is being exported to non-English countries, we wonder whether the danger of changing an established package is really as great as it seems to be? So far we have been unable to discover a single case where the sales of an established proprietary declined after adopting a new package. We have found of course numerous instances of production failures and a big mortality among new *products*, but none among established proprietaries. We take it as indicative of a future trend that when a proprietary manufacturer brings out a new package he as a rule observes the amenities with respect to pleasing design. This is emphatically true when a potential proprietary is started out through ethical channels.

We reiterate emphatically the need for dressing up a great many of the old reliable proprietaries. We wish to point out that the advances being made in the proprietary field by products, which are, properly speaking, ethical specialties, is due in large part to the fact that the ethical is as a rule much better to look at and a lot easier to use than the average proprietary of a similar nature. Of course part of this tendency is right and proper because the ethical of today may be the proprietary of tomorrow.

There is a median group of medical products which is far in advance of all others insofar as packaging is concerned. This is the ethical-proprietary group, which consists of products which were introduced as ethicals and built up by detailing physicians, and which are or may be dispensed by the physician, sold on prescription, sold on the recommendation of the druggist or purchased on hearsay by the consumer. Like the

Acetanilide
U. S. P.

We are makers of a ***Superior Product*** and solicit your inquiries for spot or contract deliveries.

CITRO CHEMICAL COMPANY
MAYWOOD, N. J.

Lanolin
U. S. P.
Superior Quality

Write for samples and quotations

Manufactured by

AMERICAN LANOLIN CORPORATION
Lawrence . . . Massachusetts

GERANIOL
for Soap

In various grades to meet every requirement as to price.

A. M. TODD COMPANY
KALAMAZOO MICHIGAN

Business Established in 1869

COSMETIC
CERTIFIED
& VEGETABLE
COLORS

Saponine—Chlorophyll

INTERSTATE COLOR CO., INC.
41 Park Row Suite 817 New York City

Silver Label Gold Label
GELATINE
Pure Food and Technical

COIGNET GELATINES
17 State Street, New York City

GLYCERINE
ALL KINDS

COLGATE-PALMOLIVE-PEET CO.
PALMOLIVE BUILDING, CHICAGO, ILL.

Produced at and shipped from
New York Kansas City Louisville San Francisco

THE DRUGGISTS' NEWS

Official organ of all Hungarian Druggists' Corporations, read by all Hungarian Druggists, Perfumers, and others in this trade.

Best Advertising Organ

for everyone interested in this trade. Will create connections, procure agencies and supply you with reports.

TRY! ADVERTISE!
Ask for copy! Ask for advertising offer!

Apply to
"DROGISTEN ZEITUNG"
Sziv utca 33,
Budapest VI HUNGARY

MARK THIS!

The Editor knows of a man with an unusually fine background in the manufacture and sale of cosmetic and pharmaceutical products. This man has held important executive positions with nationally known firms and would like to connect with an established house, preferably in the New York area, but other locations will be given consideration. This is an opportunity for manufacturers seeking a factory or general manager. Inquiries will be held in the strictest confidence. Address: The Editor, THE DRUG AND COSMETIC INDUSTRY, 101 West Thirty-First Street, New York.

regular proprietaries these products are distinguished by means of trade-marked names, statements of purpose and directions for use. The group also includes such products as ephedrine, which moves through proprietary channels in spite of the efforts of manufacturers to maintain it as a pure ethical specialty.

When we consider such fine packages as Oxinol, Calglucon, Dulcet Aspirin, Saraka, Tonikum, Roche, Neobovinine, Lilly's Merthiolate and others of like calibre, we are compelled to admit that ethical packages are far in advance of regular proprietary packages. Lilly's Merthiloate, which is intended only for the doctor's table and will probably never be sold any other way, challenges comparison with the best that has been accomplished in package design in the cosmetic branch of the industry.

Even in the "pure" ethical specialty group there are some splendid examples of progressive packaging. This group has much less apparent reason for fine packaging than the ethical-proprietaries or the regular proprietaries, because of the fact that its products *can never* be sold excepting on prescription. This group contains such products as Digitalen Roche, which must be taken under supervision and can not legally be sold without a prescription. In the same category is that vast number of products which cannot be self administered and must perforce be administered by a physician or under his supervision. Lilly, Roche, Abbott, Parke Davis, are among the manufacturers who are proving that a package has nothing to gain by being ugly or drab or too severely professional. They have demonstrated times out of number that professional dignity can be incorporated harmoniously in a design which does not offend the eyes.

A good package need not be bizarre nor impractical. Though may it be in plain black and white with no other ornament than fine lettering, it can actually be beautiful. As the "modern package" of today will be out of date tomorrow, the sensible course for the industry is to confine its package designs to simple statements, expressive of the professional dignity of our industry, avoiding at all costs trick lettering, and design motiffs which tend to date the package. That's what's wrong with proprietary packaging; it is dated.

Dangers in Cosmetics

(Continued from page 416)

an amine dye is used. These usually contain paraphenyline diamine or paratoluyline diamine. These substances are extremely dangerous and a great many cases of poisonings have been reported as resulting from using hair dyes containing them. Many damage suits by individuals who have been injured by their use have been brought against manufacturers. And speaking of damage suits a very recent press item states: that a certain concern, one which has been engaged in marketing a thallium acetate cream depilatory, has filed a voluntary petition in bankruptcy listing liabilities of $2,448,775 and this notice says that these liabilities consist in large part of damage suite pending in the courts.

Other substances also more or less dangerous are sometimes found in hair dyes. Among these are copper chloride, pyrogallic acid, salicylic acid, and resorcinol. Labels on hair dyes are often designed to mislead. A label may declare a product to be a "hair rejuvenator" when it is actually a hair dye. The label may state that the product "restores gray and faded hair to its natural color" which is not a true statement when applied to a dye. The label may state that the hair dye is "safe" or "not injurious" when it may be dangerous. A label may make a statement something like the following: "We assume no responsibility whatever for results." Such a label will mean, if one knows how to read it, that he uses the product at his own peril insofar as untoward and disastrous results to the scalp are concerned. Another label may say that the product is "free from all substances which might have an injurious effect, provided directions are adhered to." This will be a sufficient warning to the intelligent person to let the product alone. Still another label may state: "Do not let the cream get near the eyes or open cuts, or on the throat or neck, do not rub in" or the label may state: "in rare cases, the idiosyncrasy of some people subjects them to ill effects when using certain foods or remedies. In such cases we disclaim all responsibility." Intelligent persons will know the significance of such statements and will appreciate that the use of such products may be attended with danger.

A label may say that the product is "free from alcohol, silver, and lead." The significance of such statement may be in the substances the product actually contains, not those from which it is free, for instance, such a product might contain paraphenyline diamine.

Dr. Charles D. Howard, Chief of the Division of Chemistry and Sanitation of the New Hampshire State Board of Health, has done a large amount of work in investigating cosmetics. He is an authority on the subject. He says that he is seeking to abolish the use of those cosmetics which contain vicious and harmful ingredients, or at least to compel the makers of them to inform the users of any posion that may be present. He points out that many cases of poisoning, disfigurement, and health impairment are known to have resulted from the use of cosmetics containing the poisonous ingredients which I have named.

Industry's Books

Health and Physical Education Survey Methods, by Elwood Craig Davis, 162 pages, Teachers College, Columbia University, $2.00 net.

This study analyzes health and physical education surveying, by presenting various survey methods and techniques, and by formulating a detailed study of survey forms that cover every phase of health work. Manufacturers of products for children, particularly deficiency products, should find these newer methods of child health work of interest.

Les • PARFUMS de FRANCE

A MONTHLY REVIEW of the PERFUMERY TRADE of GRASSE

The Sole Publication of the World Center of FLOWER PRODUCTION

SUMPTUOUSLY PRODUCED • • PROFUSELY ILLUSTRATED

Containing every month copious articles on

◆ ◆

THE STATE OF THE FLOWER-CROPS

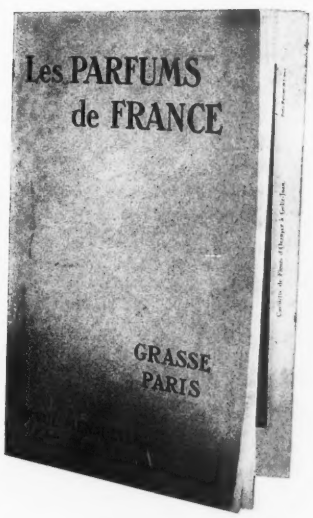
◆

THE USE AND ANALYSIS OF ESSENTIAL OILS

◆

THE UTILIZATION OF THE RAW MATERIALS IN ALIMENTATION

◆ ◆



◆ ◆

COMPOUNDED SCENTS, FORMULAE AND RECIPES

◆

TECHNICAL AND SCIENTIFIC NOVELTIES

◆

MARKET PRICES OF AROMATIC SUBSTANCES

◆ ◆

Annual Subscription { FRANCE and COLONIES . . . **75 Francs**
FOREIGN COUNTRIES . . . . **100 Francs**

SPECIMEN COPY SENT ON RECEIPT OF 5 Francs

EDITORIAL AND BUSINESS OFFICES

Avenue de la Gare — Grasse — France

Patents

UNITED STATES PATENTS

Pharmaceutical Animal Milk

Process is concerned with increasing digestibility and pharmacological action of animal milk either whole or skimmed. Casein is decomposed as far as possible and partially to amino acids by mixing milk with cultures capable of splitting casein into simpler nitrogen compounds. Milk is then in stable fermented form after cooling to and substantially freeing from oxygen. Milk is stored 4 to 6 weeks at low temperature in hermetically sealed vessels. Bacteria used are streptococcus lactis and streptococcus kefir. "Saya" Gesellschaft Zur Herstellung Von Heilmilch, Munich, Germany. U. S. P. No. 1,866,184, filed October 19, 1929.

Betaine Hydrochloride

Waste liquor of beet molasses is treated to crystallize crude product containing potassium chloride. Water solution of crude crystals is neutralized with lime. Solution is then filtered. Filtrate is finally concentrated to remove potassium chloride by crystallization. Yoshitaro Takayama, Tokyo, Japan, U. S. P. No. 1,870,319, filed March 10, 1928.

New Bismuth Antisyphilitics

Bismuth thioglycolic acid and salts possess small toxicity and good action on protozoa and are suitable for treating syphilis and other protozoa diseases. To make this product, 27.6 grams of thioglycolic acid are diluted with 2.2cc. water and neutralized with 15.9 grams calcined sodium carbonate. To solution heated on water bath, bismuth hydroxide, obtained from 53.3 grams of bismuth nitrate, is added and solution filtered. Filtrate is poured, while being agitated, into 20 parts methl alcohol, and 30 parts ether are added. Yellow sodium bismuthyl-trithioglycolate separated is isolated and dried. The 22.4 grams of salt obtained are dissolved 22.4 cc. water and by addition of 60 cc. of normal hydrochloric acid dithioglycolic acid is separated. After filtering by suction, it is washed with water and dried in vacuum. Winthrop Chemical Co., New York, U. S. P. No. 1,864,679, filed October 30, 1930.

Therapeutic Calcium Preparations

Calcium salts for intramuscular and subcutaneous administration are obtained by new process yielding non-irritating products. Calcium gluconate is suitable but its solubility in water is only 3%. However perfectly stable concentrated preparations are obtained by dissolving 100 parts of calcium gluconate in 500 parts of distilled water on water bath; solution is cooled to 10° C. and diluted with water to 1,000 parts, and rapidly filtered through sterile Chamberland filter heated to 50° C. It is poured into ampulles. Sealed ampulles are heated 3 times for half an hour each time at intervals of 2 to 3 days in current of steam. Ampulles, containing strongly supersaturated, 10% solution of calcium gluconate, prepared in this manner, have remained clear for many months. Chemical Works Formerly Sandoz, Basel, Switzerland. U. S. P. No. 1,865,141, filed September 29, 1927.

Bactericide Surface

Surfaces subjected to contact by bacteria are treated to produce on these surfaces bactericidal layer of mercury stearate. Kamill Kohn, Bokau and Theodor Gruschka, Aussig, Czechoslovakia. U. S. P. No. 1,864,073, filed March 17, 1928.

Galactonic Acid Drug

One liter of aqueous solution of galactan, derived from extraction of western larch of specific gravity 1.24, is diluted with equal volume of water, giving solution of galactan, specific gravity 1.12. Solution is warmed to 60° C. and maintained there while chlorine is passed through in minute bubbles. Substantial conversion into galactonic acid is indicated by specific rotation of light. Hydrochloric acid and excess chlorine are removed by steam or air distillation and remainder neutralized with sodium bicarbonate. Solution is evaporated at 50° to 60° C. and 24 to 25 inches mercury vacuum. Operation is stopped when desired degree of conversion is attained. A 70 per cent. conversion into lactone is obtained when specific rotation of solution is -69.5°. Pfanstiehl Chemical Co., Waukegan, Ill. U. S. P. No. 1,864,229, filed March 21, 1927.

Ethanolamine Salts of Theophylline

In making these salts, theophylline is first suspended in solvent which must be able to dissolve ethanolamine salt to be formed. Then ethanolamine is added to suspension and reaction takes place. Eli Lilly and Co., Indianapolis. U. S. P. No. 1,867,332, filed November 8, 1930.

Quinine Preparations

Use of quinine is accompanied with formation of eczemas, erthyemes, cuticaria and oedemas, fever, etc. New product obviates these effects. It is obtained by stirring 20 parts of quinine sulfate in 200 parts of water and adding dilute sulphuric acid or hydrochloric acid until liquid solution is obtained. Then ammonia liquor is added until all quinine is separated as ammonium salt. Latter is treated on suction filter until no reaction is obtained on addition of soluble barium salt or silver nitrate to wash liquor. Pure alkaloidal salt is agitated with water and pure lactic acid is added until limpid solution of quinine lactate is formed. Then 20 parts of calcium lactate and two parts of sodium citrate in solution are added. Solution is filtered and filtrate evaporated on water bath until double salt, quinine lactate-calcium tactate, separates in crystals. Leonhard Pink, Berlin, Germany. U.S.P. No. 1,865,953, filed March 8, 1929.

Thymol

An acyl compound of condensation product obtained from metacresol and acetone is heated at 100° C. in the presence of acidic condensing agent such as hydrochloric acid, phosphorus oxychloride and anyhdrous metallic chlorides. Acyl compound of 3-methyl-6-is opropylene-phenol, obtained is treated with hydrogen gas in presence of hydrogenating catalyst, until two atoms of hydrogen have been taken up. Product is saponified. Schering-Kahlbaum A.G., Berlin, Germany. U.S.P. No. 1,865,544, filed June 29, 1928.

Caffein

Caffein is made by treating theobromine with methyl chloride. Thus 180 pounds of theobromine are dissolved in 930 pounds of 4.5% sodium hydroxide solution. Then solution is methylated in autoclave heated to 70° C. and 53 pounds of methyl chloride added at rate sufficient to maintain pressure of 50 pounds per sq. in. while temperature remains at 70° C. Vigorous agitation is required. Solution is heated to 85° C. while pressure drops to 10 to 15 pounds per sq. in. Mass is allowed to cool and crystallize and caffein recovered by filtering. Caffein in mother liquor is recovered by further evaporation and crystallization. Yield of caffein is 181 to 186 pounds of anhydrous product. Monsanto Chemical Works, St. Louis. U. S. P. No. 1,865,378, filed August 5, 1927.

BRITISH PATENTS

Organic Arsenic Derivatives

Acetamidobenzyl acetate is nitrated (product melting at 110° C.), acetyl groups are removed, and resulting 2-nitro-5-aminobenzoyl alcohol, (m. p. 143° C.), is converted by Bart's reaction into 35-arsinic acid. Corresponding amine, obtained by reduction of nitro group with ferrous hydroxide, is less toxic than arsanilic acid and has greater trypanocidal and spirillocidal properties. Societe des Usines Chimiques Rhone-Poulenc, France. British Patent No. 366,183, filed November 25, 1930.

Iodine Sticks

Preparations for production of iodine at surfaces are made by melting together soluble, non-hygroscopic iodide, neutral salt and salt which in presence of acid liberates iodine from iodides. Fused mass is cast into sticks. Similar sticks are made by melting aluminum sulphate (18 H_2O) with tartaric acid or an alum. By rubbing wound with an iodide and then with an acid stick, free iodine is liberated in nascent state. P. Schestakoff. British Patent No. 374,353, filed October 9, 1931.

Stable Gluconate Solutions

Crystallization of calcium gluconate from stable supersaturated solutions is retarded by addition of calcium salt of monocarboxylic acid derived from aldodisaccharoses. For example in 5% calcium lactobionate solution, 8.8% calcium gluconate remains dissolved after 25 days. Chemische Fabrik vormals Sandoz, Switzerland. B. P. No. 372,225, filed October 14, 1931.

Pyclographic Drugs

These are normal alkylid-iodochelidamic acids made by alkylating di-iodochelidamic acid, for example with dimethyl sulfate and potassium hydroxide to give normal-methyl compound, decomposing at 174° C. Drugs are used by intravenous injection without causing rise in blood pressure and stimulation of respiratory center. Schering-Kahlbaum, A.G., Berlin, Germany. B. P. No. 372,245, filed November 30, 1931.

Hormones in Fertilizers

A new use for hormones is in the manufacture of fertilizers. Only 0.5 per cent by weight is claimed to increase the fertilizing power of both natural and artificial fertilizers. One or more isolated hormones or substances having hormone action manufactured by synthetic methods or esters or like compounds derived from such hormones are added. Examples of suitable substances are male sexual hormones, female sexual hormones, or other hormones exciting growth, synthetic thyroxin, the female sexual hormone of the formula $C_{15}H_{11}O_4NI_4$ or its benzoic acid ester. Schering Kahlbaum A. G., Berlin, Germany. B. P. No. 372,354, filed February 10, 1930.

Amino-Arsenicals

Amino groups in diaminoarsenobenzene are caused to react severally with formaldehyde-bisulfite and with an olefine oxide to give easily tolerable aresenicals valuable against amoebic dysentery. I. G. Farbenindustrie A.G., Frankfurt-on-the-Main, Germany. B. P. No. 372,313, filed September 18, 1931.

Antimony Drugs

Organic antimony drugs are made by dissolving hydrated antimony pentoxide or antimony trioxide in aqueous solutions of multivalent metal salts of gluconic type. Products are isolated by precipitation with methanol. Magnesium antimonyl-gluconate is obtained from magnesium gluconate and antimony hydroxide precipitated from tartar emetic by hydrochloric acid. Calcium, copper and nickel antimonyl gluconates and calcium antimonyl-mannonate are similarly prepared. Chemische Fabrik vormals Sandoz, Switzerland. B. P. No. 343,898, filed June 26, 1931.

Arsinic Acids

A nitro-ortho-acylaminophenol is alkylated and reduced, and amino radical replaced by arsinic acid, whereat pure products are obtained without having to separate by-products. Products are 1-alkoxy and 1-substituted-alkoxy-2-acylamino-benzenearsinic acids. I. G. Farbenindustrie A.G., Frankfurt-on-the-Main, Germany. B. P. No. 373,071, filed November 30, 1931.

Aromatic Aldehydes

Condensation of halogen-acetic esters with cyclic aldehydes or with ketones in presence of sodium amide, sodium ethylate, etc., takes place smoothly in suitable solvent (liquid hydrocarbons and their liquid halogen derivatives, for example light petroleum, cyclohexane, tetralin and decalin, benzene, toluene, phenyl chloride). Resulting glycidic esters are hydrolyzed to salts, which give aldehydes in good yield when acidified and steam distilled. Various examples are given of products having odors of raspberries, lilac, mimosa, musk grains, hay, anise, etc. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany. B. P. No. 372,013, filed March 3, 1931.

Amino-Arsenicals

A nitro-1-hydroxy-2-methoxybenzenearsinic acid is reduced, preferably as sodium salt with sodium hyposulfite, sodium amino-1-hydroxy-2-methoxybenzene-arsinate being precipitated by acetic acid. Chemotherapeutic index of products is 1:20 or more. I. G. Farbenindustrie A.G., Frankfurt-on-the-Main, Germany. B. P. No. 373,085, filed January 11, 1932.

Quinolin Drugs

Aqueous solutions of 7-iodo-8-hydroxyquinolin-5-sulfonates are stable to boiling in presence of sodium 8-hydroxyquinilin-5-sulfonate, paraphenolsulfonate, betanaphthol-3:6-disulfonate, gallates, gallocarboxylates, pyrocatechol-3:5-disulfonate, or salts of other aromatic or heterocyclic sulfonic acids or hydroxybenzoic acids. Alkali, especially sodium bicarbonate, may be present. F. Krollpfeiffer. B. P. No. 371,894, filed January 29, 1931.

Pyridone Drug

Di-iodochelidamic acid is decarboxylated by boiling with acetic anhydride, or benzoic anhydride or other anhydride. Product is hydrolyzed with water or aqueous solution of sodium hydroxide to give 3:5-di-iodo-4-pyridone. Schering-Kahlbaum A.G., Berlin. B. P. No. 372,255, filed January 12, 1932.

Pharmaceutical Gels

Vegetable gums, such as tragacanth, shiraz, which swell in cold water, are converted into solutions substantially free from foreign matter and color by allowing them to swell fully in cold water. Solutions are filtered through wire gauze. Filtered gels are converted into solutions suitable for making pharmaceutical products by heating or other known methods. A. Pfister. B. P. No. 375,161, filed October 9, 1931.

Thiol Group Pharmaceuticals

Carbohydrate derivatives having reactive halogen, for example acetobromoglucose, are treated with salt of thio-acid, and hydrolzed, whereby halogen of starting material is replaced by SH. Examples are: tetra-acetobromoglucose (m. p. 121° C.) converted by ammoniacal methanol into ammonium thioglucosate, acetobromoglyceraldehyde with potassium thioacetate, giving diacetylthioglyceraldehyde, (m. p. 160° C.) hydrolyzed to salts of thioglyceraldehyde. Schering-Kahlbaum A.G., Berlin, Germany. B. P. No. 373,755, filed May 5, 1931.

Phenol-Arsenic Acid Salts

Alkali metal salts of acylaminophenol-arsinic acids may be made by treating mono-alkali metal salt with second equivalent of same or different alkali. Sodium,-lithium, sodium-potassium and potassium-lithium salts of 3-acetamido-4-hydroxybenzenearsinic acid, and sodium salt of 3-benzamido-compounds are described. I. G. Farbenindustrie A.G., filed February 2, 1931.

Hormone Substances from Coal

Bituminous coal or alkaline solution of humic acids derived from brown coal is extracted with organic solvent immiscible with water, for example chloroform, ethyl ether or ligroin. Extract, after solvent has been removed, is again extracted with organic solvent miscible with water, for example ethyl alcohol. Tar oils, petroleum, etc. may be similarly treated except that order of using solvents is reversed. Substances are obtained which in their action of excitation of rutting are equivalent to female sexual hormone. Schering-Kahlbaum A.G., Berlin, Germany. B. P. No. 375,363, filed January 19, 1930.

GERMAN PATENTS

Stable Bismuth Medicaments

These preparations are neutral, aqueous solutions of bismuth salts and are suitable for treating blood diseases. They can be diluted in any proportion and can be sterilized. Solutions of bismuth salts, containing mineral acids, exclusive of bismuth lactate solution, are mixed with solutions of lactates. Mixture is neutralized, and bismuth salt is dissolved in solution containing mineral acid and lactate and this solution is neutralized. Dr. Emanuel Felheim, Berlin-Lichtenrade, Germany. G. P. No. 542,411, filed April 5, 1924.

(Continued on page 485)

Abstracts

Analyzing Tincture of Iodine

Method uses calcium carbonate. One sample of tincture of iodine was analyzed for free iodine content in usual manner and in another sample total iodine content was determined with potassium iodate and calcium carbonate. Difference between two determinations gives amount of combined iodine. Carl Stainer and Leon Leclerq. Journal de Pharmacie Belgique, volume 14, 1932, pages 283-285.

Benzyl Alcohol in Essential Oils

Benzyl alcohol is an adulterant in essential oils. Method for detection in presence of ethyl alcohol and methanol consists of dissolving oil in ligroin and shaking with calcium chloride. Distillate obtained from solid calcium chloride compounds is examined. Five per cent of alcohol (chloroform reaction), methanol or benzyl alcohol (oxidation to formaldehyde and benzaldehyde respectively) can be detected. H. Leonhardt and R. Wasicky Archiv der Pharmacie, volume 270, 1932, pages 249 to 252.

Adaline and Bromoural Reactions

Mixture of adaline, alpha naphthol (0.01 to 0.02 gram) and 0.2 ccm. of alcohol is treated with 0.5 ccm. of concentrated sulphuric acid. Color developed is yellowish red changing to violet red on warming. Colors are green and bluish green respectively, when betanaphthol is used. Bromoural similarly gives rose color changing to rose yellow with alphanaphthol and green with betanaphthol. E. Ekkert, Pharmazeutische Zentralhalle, 1932, volume 73, pages 369ff.

Barbital and Mercury Tannate

Barbital is precipitated with mercuric sulphate. Precipitate is dissolved in sulphuric and nitric acids. Sodium nitroprusside is added in presence of trace of potassium permanganate. Solution is titrated with tenth normal sodium chloride (one cc. is equivalent to 0.01393 gram of barbitol) till turbidity disappears. Mercury tannate is determined in above manner, one cc. of tenth normal solution of sodium chloride being equivalent to 0.01785 gram of mercury tannate. A. Ionesco-Matu and A. Popesco, Journal de Pharmacie et de Chimie, 1932, volume 15, pages 551 to 554.

Tropacocaine Reactions

Interesting reactions have been worked out for this alkaloid. In presence of sulphuric acid, alkaloid gives with resorcinol yellow, rose-red, to violet and intense red on warming (violet red in ultra-violet light). Cocaine gives yellow, brownish yellow, and grayish black (greenish blue in ultra-violet light). Ten per cent of tropococaine in cocaine can be detected by this reaction. When beta-naphthol is employed in place of resorcinol, order of colors is yellow, gray, grayish brown to grayish blue and green on heating (milky blue in ultra-violet light) and with alphanaphthol violet brown to dark violet and almost black. L. Ekkert, Pharmazeutische Zentralhalle, 1932, volume 73, pages 340 to 341.

Loganine Reaction for Tinctures

When colors are examined spectroscopically, specificity of reaction is greatly increased. Four drops of tincture of sample and one drop of sulphuric acid should be slowly warmed, spectrum examined, and, after cooling, four drops of saturated calcium chloride solution added. Red or violet colors are obtained in all cases. These change to gray, orange or violet with calcium chloride, but spectra of first colors show one strong green band for St. Ignatius' bean, nux vomica, polygala, feebler band for eucalyptus, guaiacum, gentian and benzoin (two for valerian) and no green band for asafoetida, quassia, opium, anise, colombo, digitalis or quillaia. Coignet, Journal de Pharmacie et de Chimie, 1932, volume 15, pages 456 to 463.

Anil and Styryl Quinolines

Various derivatives of above compounds are studied for their trypanccidal activity. Methods are described and compounds as well. None of anil derivatives exhibits marked trypanocidal activity. Styryl derivatives are more active. Acetylation of amino group in quinoline nucleus does not generally increase trypanocidal potency, but occasionally tends to produce convulsive effects. C. H. Browning, J. B. Cohen, K. D. Copper and R. Gulbransen. Proc. Royal Soc., 1932, B, 110, 372-77.

Mercurochrome

Bromination of fluorescein in glacial acetic acid solution gives dibromofluorescein hydrobromide and unchanged fluorescein. Hence mercurochrome prepared from this product is mixture of variable composition, containing bromo-mercuri-fluorescein and bromo-mercuri-dibromo-fluorescein, and corresponding hydroxyl compounds. Pure hydroxy-mercuri-dibromo-fluorescein is obtained by boiling pure dibromo-fluorescein with mercuric basic acetate. When mercuric chloride is used, dibromo-dimercuri compound is obtained which is very toxic. Toxicity of mercurochrome is determined by amount of free mercury present. M. A. Phillips. Quarterly Journal of Pharmacy, 1932, volume 5, pages 1 to 5.

Extract of Thyme

Method is described for evaluation of extractum thymi fld. Ten grams of fluid extract and 10 cc. of water are distilled with steam. Two cc. of distillate are treated with diazotized sulphanilic acid and compared colorimetrically with standard prepared from thymol. W. Brandrup, Apotheker Zeitung, volume 46, pages 609 to 610.

Evaluating Tincture of Iodine

Free iodine in tincture of iodine is determined with sodium hyposulphite. Ionic iodine formed together with iodine originally present, is oxidized with bromine to give iodate. Thiosulphate radicle is oxidized to sulphate. Excess bromine is removed with formic acid. Potassium iodide and sulphuric acid are added. Liberated iodine is titrated with sodium thiosulphate. F. Klatt, Apotheker Zeitung volume 46, pages 706-707.

Analyzing Potassium and Ammonium Acetate

Method is described for evaluation of solutions of potassium acetate and ammonium acetate. Aqueous solution of potassium acetate is evaporated to dryness and residue dissolved in absolute alcohol and treated with tenth normal silver nitrate in alcohol. After filtration, excess silver nitrate is determined. Aqueous solution of ammonium acetate is treated with alcohol, anhydrous sodium sulphate and tenth normal silver nitrate in alcohol. Excess silver nitrate is determined in similar manner. Silver acetate is insoluble in alcohol. S. von Bari, Archiv der Pharmacie, 1932, volume 270, 1932, pages 201 to 202.

Diacolation Method

Further study of diacolation method for extraction of various drugs. Faults have been found with method due to use of too short vessels. Complete extraction of drug and quantitative recovery of menstruum are dependent on correct dimensioning of apparatus. Uses of alcohol and water as menstrua are compared. H. Breddin, Pharmazeutische Zeitung, 1932, volume 77, page 435.

Morphine in Opium

Improvements in calcium oxide-manganese method are described. Calcium meconate present in alkaloid, may be separated by extracting impure product with methanol, in which morphine is readily soluble. No calcium meconate is present if mixture is not set aside after lime treatment. Salt remains in filtrate, from which it separates only on keeping. N. Rusting, Pharma. Weekblad, volume 69, 1932, pages 433 to 441.

Digitalis-Glycerin Preparations

Method for biological assay of digitalis preparations which contain glycerin. One per cent glycerin solution has no effect on perfused frog's heart. Injection of 35% glycerin solution intravenously does not produce concentration of 1% in blood. Hence presence of glycerin in such preparations has no pharmacological significance. J. W. Hammer, Dansk.

Tidsskr. Farm., volume 6, 1932, pages 65 to 74.

Color Reaction with Aloes

Powdered aloes (0.2 gram sample) is dissolved in 5 cc. of hot water. To cold solution are added concentrated nitric acid (one cc.) and fuming nitric acid (0.1 cc.) when intersurface is colored green. On mixing, red color is followed by green. G. Miko. Magyar Gyog. Tars. Ert., volume 7, pages 499-500.

Analysis of Citronella Oil

Methods for analysis of citronella oil are reviewed critically. Claims of accuracy for determining total geraniol are discussed in detail. Attention is called to rarity of requiring content of actual geraniol in citronella oil. Adulteration receives attention. Testing solubility in dilute alcohol is not necessarily decisive in proving presence of adulterants. Test is described wherein fatty oil present as adulterant is precipitated as white flakes. This method detects as little as 0.5 per cent of fatty oil. Presence of petroleum is determined by low solubility and low total geraniol content and presence of alcohol as adulterant by high solubility and low total geraniol content. J. Zimmermann. Perfumery and Essential Oil Record, 1932, pages 128 to 131.

Tropocaine Reactions

Tropocaine, in presence of sulphuric acid, gives with resorcinol yellow, rose red to violet and intense red on warming (violet red in ultra-violet light); cocaine similarly gives yellow, brownish yellow, and graying black (greenish blue in ultra-violet). Ten per cent of tropococaine in cocaine can be detected by this reaction. Using beta-naphthol instead of resorcinol, order of color development is yellow, gray, grayish brown to grayish blue and green on heating (milky blue in ultra-violet light) and with alpha-naphthol violet brown to dark violet and almost black. L. Ekkert, Pharmazeutische Zentralhalle, 1932, volume 73, 340-1.

Cedar Wood Oil Substitute

Mono-bromo-naphthalene-oil solution can be used as substitute for cedar wood oil. Mono-bromo-naphthalene is dissolved in polymerized castor oil. Increased viscosity of product is obtained by dissolving therein 10 to 15% of rosin. B. A. Brodsky, Pharmazeutische Zeitung, volume 77m, 1932, page 243.

Violet Leaf Perfumes

Methods are described for converting heptine into acid derivative which is then esterified to give series of esters, such as methyl, ethyl, isopropyl isoamyl, allyl and benzyl. These esters are characterized by powerful and natural violet leaf odor. Methyl octine-carbonate has somewhat sweeter and softer odor than methyl heptine-carbonate. Methods of using esters of heptine-carbonic acid as well as actine carbonic acid are described. Dr. Siegfrid Malowan. The Perfumery & Essential Oil Record, 1932, 141-2.

Use of Propyl Oxybenzoate

This product has given good results in sterilization of different solutions commonly used in pharmacy. It was determined by biological experiments, that propyl oxybenzoate is non-toxic and can be used without danger. Eschenbrenner and Dr. R. Kohn. Pharmazeutische Zeitung, 1932, number 20.

New Reaction for Aconitine

Modification of Monti's test is used to distinguish betwen aconitine and extract of total alkaloids of aconite. Residue extracted by means of chloroform from alkaline liquors, is added to sulphuric acid (one cc.), mixture is heated for 5 minutes on water bath and crystal of resorcinol added with further heating for 20 minutes. In each case stable red-violet color is produced. On transferring to beaker and neutralizing with sodium carbonate, aconitine gives colorless solution with blue fluorescence, while total alkaloids give purple solution with strong green fluorescence. C. Brugeas, Ann. Fals., 1932, volume 25, pages 147 to 149.

Stability of Acetylsalicylic Acid

After exposure to light for several months acetylsalicylic acid was found to contain a little salicylic acid. Quantity of acid gradually increased. Analysis of acetylsalicylic acid should include determination of acetylsalicylic acid, salicylic acid, tartaric acid and oxalic acid. T. G. Stathopoulos, Praktika, volume 6, pages 229 to 234.

Stability of Vitamin D Preparations

Experiments show that solution of vitamin D in olive oil may deteriorate seriously during storage for year at room temperature. Loss was not detectable at 0° C. However extrapolation indicates that half activity may disappear in three years at this low temperature. R. M. Bruce and T. M. Webster, Biochemical Journal, volume 26, page 522.

Constituents of Ergot

Value of ergot in labor is due to unidentified constituent rather than to ergotoxine, ergotamine, histamine or tryamine. Tests show marked difference in action between solid and liquid extracts of whole drug and of alkaloids alone. C. Moir. British Medical Journal, 1932, page 1119.

Pharmacology of Taxine

Only old leaves and the seeds of yew contain large quantities of taxine. Pulp of berries contains practically none. Minimum lethal doses of taxine were determinedby tests on rabbits, mice, guinea pigs and frogs. Taxine first stimulates and then depresses circulation. It causes death from asphyxia due to cardiac and respiratory failure. Apart from action on respiration, taxine has not action on central nervous system. T. Bryan-Brown, Quarterly Journal of Pharmacy and Pharmacology, volume 5, page 205.

Novoadrenalin

This substance is a precursor to adrenalin. Physiological action is distinctly different. Novoadrenalin does not show depressor effect which results with small doses of adrenalin. In large doses novoadrenalin always produces higher rise of blood pressure than corresponding amount of adrenalin. Duration of pressor effect affords another striking difference. Return to original level is much slower with novoadrenalin. Novoadrenalin is low molecular weight ester of adrenalin, possibly acetyladrenalin, and adrenalin is decomposition product of this natural substance. This would account for known difference in action between adrenalin and extracts of fresh adrenal glands. J. D. Svirbely and A. Szent-Gyoergyi. Nature, 3258, 541.

Determining Santonin

Accuracy of plus or minus 1% is obtained in determining santonin in commercial preparations by extracting latter with benzene. Residue is dissolved in ethyl alcohol and santonin is precipitated as 2:4-dinitro phenylhydrazone (m. p. 267° to 268° C.) with decomposition. Precipitating agent is 2:4-dinitrophenylhydrazine. Chocolate is shown by similar method, but by using ligroin instead of benzene, to contain one to 1.3% of santonin. O. Fernandez and L. Socias. Journal de Pharmacie et de Chimie, 1932, series VIII, volume 16, pages 49 to 54.

Copper Numbers of Drugs

Article starts with discussion of characteristics of drug by numerical designations of constituents or reactions. This refers for example to nitrogen value, saponification number, etc. Copper number is defined as equivalent amount in milligrams of copper which is reduced when one gram of material is heated with Fehling's solution. Second or "inversion" copper number is corresponding value after hydrolysis for 15 minutes with 20% hydrochloric acid. Ratio of two is copper number quotient. With drugs treated directly with Fehling's solution, or where extraneous precipitates are formed, cuprous oxide is determined with ferric sulphate and back-titration of excess with tenth normal potassium permanganate. Detailed methods and typical

(*Continued on page 487*)

Airplane View of New York Quinine & Chemical Works, Inc. Brooklyn Plant

MANUFACTURERS OF

Quinine Sulphate	Bromide of Ammonia	Strychnine
Codeine Sulphate	Bismuth Subcarbonate	Cinchonine
Potassium Iodide	Cinchona Alkaloids	Salicylates
Thymol Iodide	Bismuth Subnitrate	Cinchophen
Bromide of Soda	Codeine Phosphate	Acetanilid
Cinchonidine	Morphine Sulphate	Vanillin
Quinidine	Silver Nitrate	Brucine
Ethyl Morphine	Glycerophosphates	Thymol
Silver Salts	Bromide of Potash	Opium
Iodoform	Menthol-Y (trade-mark reg.)	

In bulk for manufacturers and in packages for wholesale trade

THE NEW YORK QUININE & CHEMICAL WORKS INC.

GENERAL OFFICES

99-117 North Eleventh Street, New York, Borough of Brooklyn

ST. LOUIS DEPOT, 403 NORTH FIRST ST., ST. LOUIS, MO.

Prices Current

Medicinal, Aromatic, and Photographic Chemicals, Crude Drugs, Spices, Essential Oils and Concentrates, Miscellaneous Raw Materials, etc.

Chemical prices quoted are of American manufacturers, spot New York, f. o. b. for immediate shipment, unless otherwise specified.

Products sold f. o. b. works are so specified. Imported chemicals are so designated. Resale stocks, when a market factor, are indicated "second hand."

Crude Drugs and Essential Oils are quoted f. o. b. New York (Manhattan with limitations) for immediate shipment

The range of price given is not "bid and asked," but are prices of different sellers, based on varying grades and/or quantities. Containers named are original packages most commonly sold.

Chemicals

Acetanilid
Hyoscyamine Hydrobromide

Acetanilid, USP, 200 lb bbls.	lb	.26 .27
Acetone, pure 350 lb drs wks.	.	.12 .14
Acetphenetidin, 225 lb bbls.	lb.	1.25 1.30
ACID, Acetylsalicylic, 225 lb	bbls.	.75 .80
Agaric, 1 oz vials	oz	... 3.50
Arsenous, USP, 220 lb bbls	lb.	... .18
Benzoic, USP, 100 lb bbls.	lb.	.50 .55
Boric, 300 lb bbls.	lb.	.07 .08
Cacodylic, 5 lb. bot.	lb.	... 8.00
Camphoric, USP, VIII 1 lb bot.	lb.	4.82 4.82
Carbolic, USP, crys 112 lb tins.	lb.	.17 .18
Cinnamic, 5 lb cans.	lb.	3.25 3.50
Citric, USP, crys 230 lb bbl	lb	... .29
USP, crys imp. 112 lb keg	lb.	.34 .36
USP, powd 200 lb bbl.	lb	... .31½
Gallic, USP, 150 lb bbls.	lb.	... .74
Glycerophosphoric, 25% 1 lb bot.	lb.	1.40 1.75
Hydriodic, USP, 10% 5 lb bot.	lb.	... .59
Hydrobromic, USP, 40% 155 lb. cbys.	lb.	... .55
Hypophosphorous, USP, 30%	lb.	
5 gal demis.	lb.	... .85
Lactic, USP, VIII 100 lb cbys	lb.	.45 .47
USP, X 100 lb cbys.	lb.	.47 .49
Phenylcinchonic	lb.	... 3.25
Phosphoric, USP, Syr 70 lb drs.	lb.	.14 .15
Pyrogallic, crys 5 lb cans.	lb.	1.30 1.40
Resublimed, 5 lb cans.	lb.	1.60 1.70
Salicylic, USP, 100 lb bbls.	lb.	.40 .45
Stearic, double pressed, bags	lb.	.08 .08½
Triple pressed, bags,	lb.	.10¾ .11½
Succinic, 100 lb bbls.	lb.	... 1.35
Sulfurous, USP, 6% 100 lb cbys.	lb.	.05 .06
Tannic, USP, fluffy 50 lb bbls.	lb.	.90 .93
Powd 200 lb bbls.	lb.	.80 .85
Tartaric, USP, 300 lb bbls.	lb	.21 .21½
Aconitine, Alk, crys 1 oz vials	oz.	... 30.00
Amorphous, 1 oz vials.	oz.	... 20.00
Adeps Lanae, hyd 350 lb bbls	lb.	.13 .15
Anhydrous, 350 lb bbls.	lb.	.14 .16
Odorless, bbls.	lb.	.32 .34
Agaricin, 1 oz vis incl.	oz.	... 2.32
ALCOHOL, Benzyl, 5 lb bot	lb.	1.20 1.35
F. O. B. Works		
Ethyl, USP, 190 pf 50 gal bbls.	gal.	... 2.535
Grain U. S. P. bbls.	gal.	... 2.585
Pure tax free drums.	gal.	
Ethyl		... .445
Grain		... .495
Denatured, (drums included) add 5c for bbls.		
No. 1 spec.	gal.	.335 .415
No. 5 comp.	gal.	.385 .465
23 a, spec.	gal.	.37 .49
39 b, spec.	gal.	.395 .515
40 m, spec	gal.	.34 .46
Isopropyl refd 98-99% drs. incl.	gal.	.55 .60
Phenylethyl, 1 lb bot.	lb.	4.30 4.50
Aloin, USP, 100 lb cases.	lb.	.85 .90
Aluminum Acetotartrate kegs	lb.	... 1.60
Amidipyrine, 10 lb boxes.	lb.	4.00 4.10
AMMONIUM, Acetate 100 lb kegs.	lb.	.38 .40
Benzoate, USP, 1 lb bot.	lb.	... 1.27
Borate, 10 lb bot.	lb.	... .35
Bromide, USP, 450 lb bbls.	lb.	.35 .36
Carb, USP, lump 150 lb kegs	lb.	... .11
USP, powd 150 lb kegs.	lb.	... .12
Citrate, 100 lb kegs.	lb.	.90 1.30
Ichthyolate, as to brand.	lb.	4.00 4.50
Iodide, USP, 25 lb jars.	lb.	... 3.72
Phosphate, dibasic 250 lb bbls	lb.	.48 .50
Salicylate, USP, 100 lb kegs	lb.	1.15 1.20
Valerate, USP, 25 lb jars.	lb.	2.75 2.90
Amylene Hydrate, 1 lb bot.	lb.	... 7.10
Antipyrine, USP, 100 lb cans.	lb.	2.00 2.50
Apomorphine Hydrochloride, ½ oz. vials.	oz.	22.00 22.70
Arecoline Hydrobrom, 1 oz vials	oz.	5.25 5.35
Aspidospermine Amorphous.	oz.	... 15.00
Atropine Alk, USP, 1 oz. vials	oz.	6.50 7.00
Methyl bromide, 1 oz vials.	oz.	... 25.00
Sulfate, 5 oz cans.	oz.	... 2.50
Single ounce.	oz.	3.00
Barbital, 1 lb. bot.	lb.	3.50 3.85
Barium Iodide, 5 lb box.	lb.	... 4.35
Sulfate, X-ray diagn bbls.	lb.	.09½ .10
BAY RUM Porto Rico, 45 gal. bbls.	gal.	.75 .80
Domestic syn. 50 gal bbl.	gal.	.70 .75
St. Thomas, 50 gal bbls.	gal.	.80 .90
Benzonaphthol, 5 lb boxes.	lb.	2.50 2.60
Benzoyl Cholride, 500 lb dr.	lb.	1.00 1.05
Benzyl Benzoate, Medicinal FFC.	lb.	1.20 1.40
Chloride Redis, 160 lb cby.	lb.	.30 .35
Formate, 1 lb bot.	lb.	3.25 3.50
Succinate, 160 lb cby.	lb.	... 5.25
BISMUTH, metal 100 lb cases	lb.	... .90
Ammon. Citrate, USP, 5 lb cans.	lb.	... 3.10
Betanaphtholate, 5 lb box.	lb.	... 2.90
Citrate, USP, 5 lb cans.	lb.	... 2.45
Chloride.	lb.	... 2.35
Hydroxide	lb.	... 2.65
Nitrate, 25 lb jars.	lb	... .95
Oxide anhydrous.	lb.	... 3.05
Oxychloride, 25 lb boxes.	lb.	... 2.60
Salicylate, 25 lb boxes.	lb.	... 1.55
Subcarbonate, USP, 25 lb boxes.	lb.	1.25 1.30
Subcarbonate, X-ray diag 1 lb. bot.	lb.	2.20 2.27
Subgallate, USP, 25 lb boxes	lb.	1.35 1.40
Subiodide, 5 lb lots.	lb.	... 3.40
Subnitrate, USP, 25 lb jar.	lb.	1.10 1.15
Subsalicylate, USP, 25 lb boxes.	lb.	2.15 2.20
Tannate.	lb.	... 2.15
Borax, crys USP, 400 lb bbls.	lb.	... .06
Bromoform, USP, 5 lb bot cases	lb.	1.65 1.90
Butylchloral Hydrate bot.	lb.	4.00 5.00
Cadmium iodide, 10 lb bot.	lb.	... 3.65
CAFFEINE Alk, USP, 1 100 lb kegs.	lb.	2.10 2.15
Citrated, 50 lb cans.	lb	1.55 1.80
Hydrobromide, 1 lb bot.	lb	4.80 5.00
Hydrochloride, 1 lb bot.	lb	6.05 6.55
Sulfate, 1 lb bot.	lb	5.40 5.90
Sodium Benzoate, tins.	lb.	... 3.05
Salicylate, tins.	lb.	... 2.95
Calcium Bromide, 100 lb cs.	lb.	... .00
Carb, USP, 175 lb bbls.	lb.	.05 .06
Gluconate, Gran. 125 lb. bbls.	lb.	.47 .52
Powd.	lb.	.47 .52
Glycerophos, 250 lb bbls.	lb	... 1.05
Hypophos, USP, 25 lb cans	lb.	.55 .60
Iodide, 5 lb bot.	lb.	... 3.75
Lactate, USP, 500 lb bbls	lb.	.35 .40
Lactophosphate Soluble.	lb.	... 1.20
Powdered tins.	lb	... 1.00
Insol, powd tins.	lb	... .50
Phosphate & Sulfate Tooth Paste grade, Works.	lbs.	.03 .06
Sulfide, USP, 100 lb drs.	lb.	.21½ .24
CAMPHOR, Jap. ref. slabs 100 lb. cases.	lb.	.38 .39
Refined powd.	lb.	.39 .40
¼ oz tab, 100 lb cases.	lb.	.46 .47
Liniment, bbls.	gal.	2.10 2.20
Monobrom, 100 lb cases.	lb.	1.60 1.65
Casein edible, 100 lb kegs.	lb.	.45 .55
Charcoal Animal medicinal jars incl.	lb.	... .50
Charcoal Wood, powd, 100 lb. bbls.	lb.	.06 .07
Chloral Hydrate, USP, 25 lb jars.	lb.	.75 .77
100 lb drums.	lb.	.70 .75
Cholesterin	lb.	15.00 20.00
Chloroform, USP, 50 lb drs.	lb.	.25 .27
Chlorophyll, 1 lb. bot.	lb.	3.75 4.00
Chromium Sulfate Scales, tins	lb.	.45 .50
Powdered tins.	lb.	.50 .55
Chrysarobin, 50 lb tins.	lb.	2.50 2.55
Cinchonine Alk, 100 oz tins.	oz.	... .34
Crystal.	oz.	.43 .46
Sulfate, 100 oz tins.	oz.	... .23
Cinchonidin Sulfate, 100 oz tins	oz.	.32 .35
Cinchophen, U.S.P. kegs.	lb.	... 2.75
Cocaine Alk, USP, 1 oz vial.	oz.	... 11.07
Hydrochloride, USP,	oz.	... 8.50
CODEINE Alk, 1 oz vials, 10 lots.	oz.	... 10.52
Hydrobromide.	oz.	... 8.92
Hydrochloride.	oz.	... 9.52
Nitrate, oz vl 10 oz lots.	oz.	... 9.80
Phosp. oz vl, 10 oz lots.	oz.	... 7.92
Salicylate.	oz.	... 8.25
Sulfate, oz vl, 10 oz lots.	oz.	... 8.42
Colchicino Alk, USP, 1 oz vl.	oz.	... 20.00
Salicylate, 1 oz vls.	oz.	... 35.50
Cream Tartar, USP, 300 lb bbls	lb.	.16½ .17
Imp. powd. 224 lb bbls.	lb.	.17½ .17¾
Creosote, USP, 42 lb cbys.	lb.	.45 .47
Carbonate, 150 lb.	lb.	1.50 1.60
Cresol, USP, 400 lb drums.	lb.	... .18
500 lb drums.	lb.	.12 .15
DIGITALIN Pure, 1 oz vial.	oz	15.00 15.50
Dover's Powder, USP, 5 lb tin	lb.	2.75 2.80
Duboisine Sulfate, 1 oz vl.	oz.	35.00 40.00
Emetine Alk, 15 gr vial.	oz.	... .85
Hydrochloride, USP, 1 oz vl	oz.	25.00 26.00
15 grain vials.	oz.	2.50 2.70
Ephedrine, alk. 25 oz. tins,	oz.	1.50 1.90
Hydrochloride, 25 oz. tins, oz.		1.30 1.65
Sulfate, 25 oz. tins.	oz.	1.30 1.65
Epsom Salts, USP, 200 lb bbls	100 lb.	2.25 2.50
Imp. 100 lb bbls.	100 lb.	2.30 2.35
Ergotin Bonjean, 1 lb jars.	lb.	18.50 19.00
Eserine Alk, 1 oz vials.	oz	... 50.00
Salicylate, 1 oz vials.	oz.	.. 40.00
Sulfate, USP, VIII 1 oz vials	oz.	... 40.00
ETHER, USP, 55 lb drums.	lb.	... .11
Anaesthesia, 55 lb drums.	lb.	.21 .23
Nitrous, 1 lb bot.	lb.	... .80
Ethyl Chloride, 200 lb bot.	lb.	.22 .24
Ethyl Iodide, 5 lb bot.	lb.	... 4.95
Formaldehyde, USP, 100 lb cbys 1c-1 wks.	lb.	.07 .07½
Gall Extract.	lb.	.20 .21
GLANDULAR SUBSTANCES		
Duodenal Substance, 1 lb lots		... 3.75
Liver Substance (Hepatic) 1 lb lots.		... 4.00
Orchic Substance (Testicular)		... 3.75
Ovarian Substance, whole, 1 lb lots.		... 14.50
Ovarian Residue, 1 lb lots.		... 11.50
Pituitary Substance, whole 1 lb lots.		... 34.50
Pituitary Substance, Anterior Lobe, 1 lb lots.		... 24.50
Thyroid, U. S. P., 1 lb lots.		... 3.75
Oxgall Powder, 1 lb lots.		... 1.25
GLYCERIN, CP, 550 lb drums	lb.	... .10½
Gold Chloride, bottles.	oz.	12.00 12.50
Guaiacol, liq. USP. 100 lb cbys.	lb	1.60 1.70
Crystals.	lb	2.25 2.50
Benzoate, 1 lb bottles.	lb.	... 3.00
Carbonate, 5 lb boxes.	lb.	1.75 1.80
Halazone, 5 lb bot.	lb.	2.75 3.25
Hexamethylenetetramine, USP, 100 lb dr.	lb.	.46 .47
Homatropine Hydrobrom USP.	oz.	... 14 50
5 oz and 1 oz vials.	oz.	... 13.50
Hydrastine Alk, USP, 1 oz vial	oz.	20.50 21.00
Hydrochlide, USP, 1 oz vials	oz.	20.50 21.00
Sulfate, 1 oz vial.	oz.	22.50 23.00
Hydrastinine Hydrochloride, USP, 15 gr vials.	oz.	... 40.00
Hydrogen Peroxide, USP, soln 375 lb bbls.	lb.	.03½ .04½
Hyoscine Hydrobrom, USP, 1 oz vials.	oz.	... 35.00
5 oz, 1 oz vials.	oz.	13.07 13.57
Hyoscyamine Alk, crystals, 1 oz vials.	oz.	... 25.07
Amorphous, 1 oz vial.	oz.	... 75.07
Hydrobromide, USP 1 oz vial		

....oz.	...	25.00
Sulfate, 1 oz vial....oz.	...	25.07
Hypoquinone, 100 lb kegs...lb.	...	1.10
ICHTHYOL, tins.....lb.	4.00	4.25
Iodide Arsenous, 5 lb bot...lb.	...	5.20
Arsenous-Mercuric soln, 5 lb bot.....lb	...	.26
Iodine, crude, 200 lb kegs...lb.	...	1.95
Resublimed, 25 lb jars....lb.	...	2.65
Tincture bbls.....gal.	...	2.55
Iodoform, powd 10 lb bot...lb.	...	5.20
Iron & Ammonium Citrate, USP, 50 lb cans.....lb.	.42	.44
Chloride, USP, lump 400 lb bbls.....lb.	.06	.08
Citrate, USP, VIII 25 lb can .....lb.	.94	.99
Hypophosphite, 5 lb cans..lb.	1.40	1.50
Iodide, 1 lb bottles.....lb.	...	3.00
Phosphate, USP, 50 lb cans .....lb.	...	.69
& Potas Oxalate, 250 lb bbl .....lb.	...	.45
Pyrophosphate, USP, 50 lb .....lb.	.74	.80
& Sod Oxalate, 50 lb. cans.lb.	...	.30½
Sulfate, USP, crys bbls....lb.	.04	.04½
Ferrous dried bbls.....lb.	...	.08
Valerate, tins.....lb.	2.75	3.00
Jalap Resin, USP lumps, 5 lb tins.....lb.	...	4.00
Powdered, tins.....lb.	...	4.65
Lead Acetate, USP, 100 lb kegs .....lb.	.16½	.19½
Iodide, USP, VIII 5 lb bot.lb.	...	2.55
Lecithin, 5 oz. jars.....oz.	1.00	1.30
Vegetable, cans.....lb.	1.00	2.50
Licorice Ext Mass, cases....lb.	.19	.20
Compound powder, bbls...lb.	.11	.13
LITHIUM CARBONATE, 250 lb bbls.....lb.	1.25	1.35
Citrate, USP, 100 lb kegs..lb.	...	1.40
Iodide, 5 lb bottles.....lb.	...	4.60
Lobeline Sulfate, ¼ oz vial...oz.	...	8.75
Magnesium Carbonate, USP, 100 lb bbls.....lb.	.08	.09
English, oz blocks.....oz.	.16	.18
Glycerophosphate, 5 lb tins.lb.	3.20	3.25
Hypophosphite, 5 lb cans..lb.	1.10	1.15
Salicylate, 100 lb kegs.....lb	...	1.10
Stearate, bbls.....lb.	.18	.20
Oxide, 100 lb. cases.....lb.	.35	.45
Manganese Glycerophosphate, 5 lb tins.....lb.	2.90	3.00
Hypophosphite, USP, VIII 5 lb cans.....lb.	1.35	1.40
Iodide, 1 lb bottles.....lb.	...	5.35
MENTHOL, USP, 60 lb cases .....lb.	3.25	3.40
Synthetic, cases.....lb.	2.50	2.75
Mercury Metal, 75 lb flasks..fl.	49.00	50.00
Bichloride, crys 25 lb box..lb.	...	.82
Gran powd, 100 lb kegs..lb.	...	.67
Bisulfate, 25 lb boxes.....lb.	...	1.48
Blue Mass, 25 lb boxes....lb.	...	.84
Powd, 25 lb boxes.....lb.	...	.85
Blue Ointment, USP, 50%, 25 lb cans.....lb.	...	.91
Mild 30%, 25 lb cans....lb.	...	.64
33 1/3% mercury.....lb.	...	.67
Calomel, 50 lb boxes.....lb.	...	1.15
English.....lb.	2.65	2.75
Iodide, green, 25 lb jars....lb.	...	3.95
Red, USP, 25 lb jars...lb.	...	3.55
Yellow, USP, VIII, 25 lb jars.....lb.	...	3.65
Red precip.Powd.USP, 25 lb. boxes.....lb.	...	1.24
White precip, Powd., USP, 25 lb. boxes.....lb.	...	1.31
Salicylate, 25 lb bot.....lb.	...	2.32
With chalk, USP, 25 lb boxes .....lb.	...	.69
Methanol, Pure 1c-1 drs....gal	...	.44
Methyl Salicylate, USP, 50 lb cans.....lb.	.40	.42
Methylene Blue, USP, med 5 lb cans.....lb	2.00	2.05
Milk powd, 150 lb bbls.....lb.	.09	.12
MORPHINE Alk, 5 oz tin...oz.	10.90	10.95
Acetate, 5 oz tins.....oz.	8.75	8.80
Hydrobromide, 5 oz tins, 10 oz lots.....oz.	8.75	8.80
Hydrochloride, 5 oz tins, 10 oz lots.....oz.	8.75	8.80
Ethyl Hydrochloride, 5 oz tins 10 oz lots.....oz.	...	10.85
Sulfate, 5 oz tins, 10 oz lots oz.	7.85	8.00
Naphthalene Flake, 175 lb bbls wks.....lb.	.04½	.05
Balls, 250 lb bbls wks.....lb.	.05½	.06
Oxgall, Purified, 5 lb bot....lb.	1.75	2.50
USP, 5 lb bot.....lb.	2.00	2.50
Oxyquinoline Sulfate, tins...lb.	8.50	9.25
Pancreatin, USP, 100 lb....lb.	...	1.90
Paraffin, refd, 200 lb cs slabs 118 -120 deg MP.....lb.	.08	.09
128-132 deg MP.....lb.	.07½	.07¾
Para-Aldehyde, USP, 100 lb. carboys.....lb.	.48	.50
Pepsin, USP, 100 lbs. 1:3000.lb.	...	2.25
100 lbs. 1:6000.....lb.	...	4.00
100 lbs. 1:10000.....lb.	...	6.50
Peptone, powd, 5 lb bot.....lb.	...	1.50
PHENOBARBITAL, U. S. P., 100 lb. lots.....lb.	...	6.50
Phenolphthalein, U. S. P.....		
100 lb drums.....lb.	...	.62
5 lb cans 100 lb lots..lb.	...	.70
Yellow.....	...	.57
Pilocarpine Hydrochloride, USP, 1 oz vials 25 oz lots .....oz.	...	3.25
Nitrate, 25 oz lots.....oz.	...	3.25
Single ounce.....oz.	...	3.50
Alkaloid, 15 gr vials.....vl.	...	.75
Piperadine, 25 oz bottles.....lb.	...	8.00
Popodhyllin 5 lb bottles.....lb.	4.35	4.50
Potassium Acetate, USP, 100 lb kegs.....lb.	.29	.30
Bicarb, USP, crys 320 lb bbls .....lb.	.09½	.10
Bromide, USP, crys 100 lb cs .....lb.	.31	.32
Citrate, USP, 100 lb. box..lb.	.42½	.43
Guaiacol Sulfonate.....ib.	1.95	2.25
Potassium Hypophosphite, 10 lb. cans .....lb.	.65	.70
Iodide, USP, 50 lb cases...lb.	...	2.15
Lactophosphate, 4 ox bot..lb.	...	.90
Permangan, USP, crys, 100 lb drs wks.....lb.	.16	.16½
Phosphate dibasic pure, kegs .....lb.	...	.49
Salicylate, 25 lb cans.....lb.	...	1.18
Sulfate, USP, VIII, 100 lb kegs.....lb.	.13	.15
Sulfocyanide, CP 15 lb jars lb.	...	.50
Tartrate, CP, tins.....lb.	...	.65
Pyrogallol, USP, see Acid Pyro-gallic.....	...	...
Quinidine Alk, 100 oz tins...oz.	.75	.80
Sulfate, 100 oz tins.....oz.	...	.50
QUININE SULFATE, USP, 100 oz tins.....oz.	...	.40
1 oz tins, 100 oz lots....oz.	...	.50
Acetate.....oz.	...	.74
Arsenate.....oz.	...	.76
Benzoate.....oz.	...	.74
Bisulfate, USP.....oz.	...	.40
Citrate.....oz.	...	.50
Dihydrobromide.....oz.	...	.54
Dihydrochloride, USP....oz.	...	.54
Ethyl Carbonate, 16 oz tins .....oz.	...	.54
Ferrocyanide.....oz.	...	.74
Formate.....oz.	...	.72
Glycerophosphate.....oz.	...	.92
Hydrobromide, USP.....oz.	...	.50
Hydrochlorosulfate.....oz.	...	.54
Hypophosphite.....oz.	...	.70
Lactate.....oz.	...	.66
Phenolsulfonate.....oz.	...	.78
Phosphate.....oz.	...	.62
Salicylate, USP.....oz.	...	.52
Tannate, USP.....oz.	...	.40
Tartrate.....oz.	...	.74
Valerate.....oz.	...	.78
Urea Hydrochloride, USP.. .....oz.	...	.54
Rennet, N. F. 5 lb 1:25,000...lb.	2.95	3.50
Resorcinol, USP, 25 lb cans..lb.	1.57	1.65
Rochelle Salt, USP, 225 lb bbl .....lb.	.13½	.14
Rock Sugar, 5 lb boxes.....lb.	...	.15
Saccharin, USP, 10 lb cans...lb.	1.70	1.80
USP, Soluble, 10 lb cans...lb.	1.75	1.85
Salicin, USP.....lb.	...	12.50
SALOL, USP, 100 lb drums..lb.	...	.90
Saltpetre, powd, bbls wks....lb.	.06½	.08¼
Santonin, USP, bulk.....lb.	50.00	60.00
Saponin, refined.....lb.	1.30	1.50
Seidlitz Mixture, 250 lb bb..lb.	.11½	.12
Silver Metal, American.....oz.	...	.29½
Iodide, 16 oz lots.....oz.	...	.69
Nitrate, 100 oz bottles....oz.	.21	.23
Nucleinate, bulk.....oz.	...	.37
Proteinate.....oz.	.39	.41
SODIUM BENZOATE, USP, 100 lb bbls.....lb.	.42	.47
Bromide, USP, 100 lb kegs.lb.	.31	.32
Cacodylate, USP, 25 lb bot .....lb.	4.75	5.90
Citrate, USP, X100 lb. box.lb.	.33½	.35½
USP VIII, 100 lb. box..lb.	.26½	.28
Glycerophosphate, N.F., crys 25 lb cans.....lb.	1.27	1.33
Powder, 25 lb tins.....lb.	1.32	1.38
Soln, USP, 25 lb tins...lb.	1.05	1.15
Hypophosphite, USP, 25 lb cans.....lb.	.60	.65
Iodide, USP, 25 lb jars...lb.	...	2.75
Phosphate (Mono-Sodium), 100 lb kegs.....lb.	.28	.29
Di-Sodium USP, granular, 275 lb bbls.....lb.	.07½	.08
Pyrophosphate, 100 lb kegs .....lb.	...	.29
Salicylate, 100 lb kegs....lb.	...	.47
Sulfocarbolate, USP, 100 lb kegs.....lb.	...	.25
Sulfocyanate, CP crys, jars included.....lb.	...	.60
Spartein Sulfate, USP, 25 oz bulk.....oz.	.65	.70
Single oz vial.....oz.	.77	.90
STRONTIUM BROMIDE USP, 50 lb kegs.....lb.	.46	.47
Carb, 100 lb kegs wks....lb.	...	.20
Iodide, USP, 25 lb jars....lb.	...	3.00
Lactate, kegs.....lb.	.90	1.10
Nitrate, 600 lb bbls NY...lb.	.08	.08½
Imp. bbls NY.....lb.	.08	.08½
Salicylate, USP, 100 lb keg lb.	...	1.10
Strophanthin, USP, 1 oz vial.oz.	19.00	19.00
Crystals.....lb.	75.00	75.00
Strychnine Alk, USP crys, 100 oz tins.....oz.	...	.55
Powdered.....oz.	...	.45
Acetate.....oz.	...	.65
Arsenate, 25 oz cans.....oz.	...	.65
Glycerophosphite, USP....oz.	...	.65
Hydrobromide..... .....oz.	...	.65
Hydrochloride.....oz.	...	.65
Hypophosphite.....oz.	...	.75
Nitrate, USP.....oz.	.55	.72
Phosphate.....oz.	...	.65
Sulfate, USP, powd.....oz.	...	.37
Sugar, refined, 275 lb bbl 100 lb	5.80	5.90
Milk, USP, 200 lb bbls...lb.	.18	.20
Sulfonethylmethane, USP, 10 lb boxes.....lb.	3.85	4.05
Sulonmethane, USP, 10 lb box .....lb.	2.65	3.85
Sulfur flwrs. washed, USP, 125 lb bbl.....lb.	...	.06
Iodide, USP, VIII, 5 lb bot lb.	...	3.85
TARTAR EMETIC, USP, 300 lb bbls.....lb.	.26	.28
Terebene, tins.....lb.	...	.85
Terpin Hydrate, USP, 100 lb kegs.....lb.	.30	.32
Theobromine Alk, 5 lb cans..lb.	1.85	2.15
Sod. Salicylate, 1 lb bot...lb.	...	2.10
Sod. Benzoate, 1 oz vials..oz.	...	1.00
Thymol, USP, 25 lb tins.....lb.	1.25	1.35
Iodide kegs.....lb.	...	4.30
Veratrine Alkaloid.....oz.	...	2.25
Sulfate, 1 oz vials.....oz.	...	2.25
Witch Hazel Ext., 50 gal bbl .....gal.	.60	.80
Zinc Carb, USP, 100 lb keg..lb.	.28	.31
Chloride, USP, 25 jars ex..lb.	.24	.29
Iodide, 5 lb bottles.....lb.	...	4.25
Oxide, USP, 100 lb bbls...lb.	.13	.14
Stearate, USP, 50 lb bbl..lb.	.16	.18
Sulfate, USP, 100 lb bbl..lb.	.08	.09
Sulfocarbolate, 100 lb kegs..lb.	.23	.26

Miscellaneous

Absorption Bases.....lb.	.60	.75
Castor Oil, odorless, bbls.....lb.	...	.12
Chalk drop, 175 lb. bbls.....lb.	...	.03½
Precip. light, 250 lb. cask..lb.	...	.04½
Heavy 540 lb. casks.....lb.	...	.02½
Bulk.....ton	...	5.00
English light, bags.....lb.	...	.04½
English light, casks.....lb.	.05½	...
Cocoa Butter, fingers..... 12 lb. box.....lb.	.24	.26
Cod Liver Oil Nor. 30 gal. bbls	17.00	20.00
Newfoundland.....bbl.	...	25.00
Collodion U. S. P. 30 lb. dr...lb.	...	.23
Colors certified; 1 lb. cans, 5 lb cans		
Amaranth No. 107.....lb.	2.55	2.65
Brilliant Blue F.C.F.....lb.	13.25	13.50
Erythrosine No. 517.....lb.	17.00	17.50
Orange 1nd. 85.....lb.	2.55	2.65
Ponceau 3R No. 56.....lb.	5.25	5.50
Tartrazine No. 94.....lb.	2.55	2.65
Corn Syrup 42° 50 gal. bbl. .....100 lb.	3.91	4.16
Gelatin, USP, Silver 100 lb. cases.....lb.	.55	.60
Pure Food, 50 lb. bbl.....lb.	.53	.55
Glucose, (grape sugar) dry 70° bags c-1 NY.....100 lb.	3.14	3.24
Haarlem Oil, bot 6 gross cases .....gross	...	3.75
Imported, 5 gr. cs.....gross	...	3.50
Kaolin, Bags.....lb.	.06	.08
Colloidal Grade 200 lb. tin lined wooden drums....lb.	.15	.29
Mineral Oil White, 50 gal. bbls.		
80-85 vis.....gal.	.45	.50
85-90 vis.....gal.	.65	.70
125-130 vis.....gal.	.75	.85
290 vis.....gal.	.80	.90
Russian 80-85 vis.....gal.	.55	.60
110-115 vis.....gal.	.70	.75
145-155 vis.....gal.	.73	.78
180-185 vis.....gal.	.78	.83
320-330 vis.....gal.	.83	.88
Olive Oil, Edible bbls.....gal.	1.45	1.55
Paraffin Wax, fully refined, slabs		
125 @ 127 A.M.P. bags lb.	...	.03½
130 @ 132 A.M.P. bags lb.	...	.03¾
135 @ 137 A.M.P. bags lb.	...	.04½
Petrolatum, Lily White, USP. 400 lb. bbl.....lb.	.07½	.08½
Snow White USP, 400 lb. bbls.....lb.	.09	.10
Rice Starch, 140 lb bags....lb.	.09	.10
Soap Castile, bars 40 lb. Case .....Cs.	...	12.75
Powd. USP 250 lb. bbls...lb.	.26	.28
Green, USP, 450 lb. bbls...lb.	.07½	.07¾
Neutral, powd. 200 lb. bbls.lb.	.18	.20
Talc, Italian, 220 lb bags...ton.	60.00	80.00
French, 220 lb bags.....ton.	40.00	45.00

Waxes, See Drugs & Spices

Aromatics and Essential Oils

Acetophenene, CP, 1 lb bot . lb.	3.50	3.65
Aldehyde, C 8 (Otcyl) 1 lb bot ..... lb.	...	38.00
C 7, 1 lb bot ..... lb.	4.50	5.50
C 9 (Nonyl), 1 lb bot .... lb.	...	56.00
C 10 (Decyl), 1 lb bot .... lb.	..	36.00
C 14, 1 lb bot ..... lb.	..	18.00
C 16, 1 lb bot ..... lb.	...	16.00
AMYL ACETATE, pure, 25 lb cans ..... lb.	.43	.50
Butyrate, 1 lb bot ..... lb.	1.25	1.50
Butyrate, 5 lb bot ..... lb.	...	1.00
Cinnamate, 5 lb bot ..... lb.	9.50	9.75
Formate, 1 lb bot ..... lb.	...	1.75
Formate, 5 lb bot ..... lb.	...	1.60
Phenyl Acetate, 1 lb bot... lb.	4.50	5.00
Salicylate, 100 lb cbys..... lb.	.70	.75
Imported..... lb.	.25	2.50
Anethol, 2 lb bot..... lb.	.95	1.10
Anisic Aldehyde, 1 lb bot.... lb.	3.10	3.60
Benzaldehyde, USP, 40 lb cbys ..... lb.	...	...
50 lb cbys..... lb.	1.35	1.45
FFC, 40 lb cbys..... lb.	1.25	1.35
Benzoic Ether, see Ethyl Benzoate.....		
Benzophenone, 1 lb bot..... lb.	1.75	2.25
Benzyl Acetate, 100 lb cbys.. lb.	.60	.80
Alcohol, 5 lb bot..... lb.	.85	.95
BENZYL BENZOATE.....	1.10	1.15
Medicinal, FFC..... lb.	...	1.40
Buytrate, CP, 1 lb bot.... lb.	9.25	9.50
Benzyl Cinnamate, 1 lb bot. lb.	7.00	7.25
Formate, 1 lb bot..... lb.	3.15	3.25
Propionate, 1 lb bot..... lb.	2.25	2.40
Succinate, 1 lb bot..... lb.	5.25	5.50
Valerate, 5 lb bot..... lb.	3.00	3.25
Borneol, 1 lb bot..... lb.	1.35	1.85
Bornyl Acetate, 1 lb bot.... lb.	1.50	2.60
Bromstyrol, 25 lb cases..... lb.	3.75	3.85
Butyl Anthranilate dom, 1 lb bot..... lb.		
Carvol, 5 lb bot..... lb.	3.00	3.40
Cinnamic Acid, 5 lb cans.... lb.	3.25	3.50
Alcohol liquid, 1 lb bot... lb.	2.50	2.60
Crystallizable..... lb.	7.00	8.00
Aldehyde..... lb.	2.25	2.50
Imported, 1 lb bot..... lb.	7.75	9.00
Citral, 25 lb cans..... lb.	1.65	3.00
Citronellal 1 lb bot..... lb.	2.00	4.00
Citronelyl Acetate, 1 lb bot.. lb.	4.25	4.50
Coumarin, 25 lb cans..... lb.	3.25	3.50
DECYL ALCOHOL..... lb.	22.00	25.00
Diphenyloxide, 25 lb tins.... lb.	1.05	1.20
Diphenyl Methane..... lb.	1.75	2.00
Duodecyl Alcohol..... lb.	20.00	22.00
Ethyl Acetate, pure, 5 lb bot. lb.	.05½	.06½
Benzoate, 5 lb bot..... lb.	1.25	1.50
Ethyl Butyrate, 5 lb bot.... lb.	1.80	2.00
Caproate, 1 lb bot..... lb.	3.25	3.50
Cinnamate, 1 lb bot..... lb.	4.00	4.50
Formate, 5 lb bot..... lb.	1.00	1.25
Methyl Paracresol, 1 lb bot ..... lb.	3.25	3.50
Phenyl Acetate, 5 lb bot.. lb.	3.75	4.00
Valerate, 5 lb bot..... lb.	...	3.75
Salicylate, 5 lb bot..... lb.	1.95	2.00
Eucalyptol, USP, 50 lb cans.. lb.	.55	.60
Eugenol, USP, 25 lb cans.... lb.	2.00	2.50
Geraniol, 50 lb cases..... lb.	1.75	2.35
Geranyl Acetate, 1 lb bot.... lb.	2.75	2.80
Butyrate, 1 lb bot..... lb.	13.00	13.50
Formate, 1 lb bot..... lb.	12.00	12.50
Heliotropin, 100-10 lbs..... lb.	1.65	1.75
Imported..... lb.	1.95	2.05
Hydroxycitronellal, 1 lb..... lb.	3.60	5.60
Indol, CP, 1 oz bot..... oz.	2.90	3.00
IONONE, 1 lb bot 100%... lb.	5.00	6.00
Alpha..... lb.	4.50	4.70
Beta..... lb.	5.70	5.75
Methyl..... lb.	5.00	5.25
Iso Borneol..... lb.	2.25	2.35
Iso Bornyl Acetate..... lb.	3.00	3.20
Iso-Butyl Benzoate, 5 lb bot. lb.	2.75	3.00
Iso-Eugenol, 1 lb bot..... lb.	3.50	3.55
Iso-Safrol, 1 lb bot imp..... lb.	1.75	1.85
Domestic, 5 lb bot..... lb.	3.50	3.75
Linaloi from Bois de Rose, 5 lb bot..... lb.	1.65	3.50
Linalyl Acetate, 1 lb bot.... lb.	2.25	2.35
Benzoate, 1 lb bot..... lb.	13.00	14.00
Formate, 5 lb bot..... lb.	10.50	12.00
METHYL ACETOPHENONE ..... lb.	2.00	2.15
Anthranilate, 1 lb bot..... lb.	2.15	2.20
Imported..... lb.	2.70	2.75
Anthranilic Acid..... lb.	8.25	8.50
Benzoate, 5 lb bot imp.... lb.	1.25	1.35
Domestic, 5 lb bot..... lb.	1.25	1.35
Cinnamate, 1 lb bot..... lb.	3.35	3.85
Heptenone, 1 lb bot..... lb	3.50	4.00
Paracresol, 1 lb bot..... lb	4.50	8.00
Phenylacetate, 5 lb bot.. lb	2.50	2.75
Salicylate, USP, 500 lb dr . lb.	...	.40
50 lb cases..... lb.	...	.42
Mirbane rect. 1,000 lb drs... lb.	.12	.13
Musk Ambrette 1 lb cans... lb	6.00	6.25
Ketone 1 lb cans..... lb	7.55	7.80
Xylene 5 lb cans..... lb.	2.25	2.85
Nerolin 1 lb cans..... lb.	1.35	1.40
Octyl Alcohol 1 lb bot..... lb.	16.00	18.00
Oenanthic Ether lb bot..... lb.	1.90	2.00
Oleoresin Aspidum..... USP, bot and tins..... lb.	...	1.25
Capsicum, USP, bot and tins ..... lb.	2.10	2.20
Cubeb, USP, bot and tins.. lb.	2.50	2.75
Ginger bot and tins..... lb.	2.25	2.75
Malefern see Aspidum.....		
Orris, bot & tins..... lb.	12.00	15.00
Pepper, black, USP, bot & tin ..... lb.	...	9.50
Vanilla, bot & tins..... lb.	7.00	7.75
Paracresol Methyl Ether.... lb.	4.25	4.50
Paracresyl Acetate..... lb.	5.50	5.75
Para Cymene Refd 110 gal dr ..... gal.	2.25	2.50
PHENYLACETALDEHYDE 50% 1 lb bot..... lb.	4.50	4.75
Imported 50%..... lb.	4.50	4.75
100%..... lb.	8.00	8.25
Phenylacetic Acid 1 lb bot.. lb.	2.65	2.90
Phenyl Diacetate 1 oz bot... oz.	3.00	3.25
1 lb bot..... lb.	8.00	10.00
Imported..... lb.	7.00	7.75
Phenylethyl Alcohol 1 lb bot. lb.	3.75	4.00
Phenyl Ethyl Acetate..... lb.	8.25	8.75
Butyrate 1 lb bot..... lb.	15.00	16.00
Formate, 1 lb bot..... lb.	19.00	21.00
Propionate, 1 lb bot..... lb.	10.00	12.00
Valerate, 1 lb bot..... lb.	14.00	15.00
Phenylpropylalcohol, 1 lb bot ..... lb.	8.50	9.00
Rhodinol, 1 lb bot..... lb.	7.00	8.00
Saffrol, drums..... lb.	.30	.32
60 lb cans..... lb.	.32	.34
Skatol, 1 oz bot..... lb.	4.50	7.00
Terpinyl Acetate, 25 lb cans.. lb.	.85	.90
Imported, 25 lb cans.....	.85	.90
TERPINEOL, CP, 1000 lb drs ..... lb.	.27	.29
50 lb cans..... lb.	.31	.33
Absolute, 25 lb cans..... lb.	.48	.50
Imported, 25 lb cans... lb.	.58	.60
TOLYL ALDEHYDE, F.F.C. 40 lb. carboys..... lb	1.25	1.50
Valerianic Ether see Ethyl Valerate.....		
Vanillin (Clove Oil), USP. lb.	5.50	5.75
(Guaiacol) USP..... lb.	5.00	5.25

Essential Oils

Almond Bitter, USP, 5 lb bot lb.	2.15	2.25
Bitter, ffPA, 5 lb bot..... lb.	2.25	2.40
Sweet, 56 lb cans..... lb.	.30	.33
Almond Meal, 25 lb cans.... lb.	.20	.21
Amber crude, 25 lb tins..... lb.	.15	.17
Rectified, 25 lb tins..... lb.	.50	.53
Amber liquid, 400 lb drs..... lb.	2.20	2.30
Ambergris, Black, boxes..... oz.	14.00	15.00
Gray boxes..... oz.	25.00	30.00
Angelica Root, 1 lb bot..... lb.	20.00	30.00
Anise Tech, 400 lb drums... lb.	.30	.32
USP, 60 lb cans..... lb.	.32	.34
Apricot Kernel, 50 lb cans... lb.	.22	.23
Bay, 25 lb tins N. F. V., 50.55% Phenol..... lb.	1.55	1.70
Terpeneless..... lb.	4.25	4.45
BERGAMOT, 25 lb coppers. lb.	1.80	2.00
Terpeneless..... lb.	6.25	9.25
Artificial, 25 lb cans..... lb.	1.25	1.50
Birch, Sweet, Northern, 25 lb tins..... lb.	3.00	3.10
Southern, 25 lb tins..... lb.	...	1.85
Birch Tar, rect., 5 lb bot..... lb.	.50	.55
Crude, 50 lb tins..... lb.	.13	.14
Bois de Rose, tins Brazillian..... lb.	.95	1.10
Cayenne, tins..... lb.	1.85	2.00
Cade, 25 lb cans..... lb.	.24	.25
Cajuput, native, 50 lb tins.. lb.	.48	.60
Calamus, 5 lb bot..... lb.	2.75	3.00
Camphor Sassa, 1000 lb drs..lb.	.10½	.12½
White, 400 lb drs..... lb.	.12	.13
Cans, 50 lbs..... lb.	.14	.16
CANANGA, Native 25 lb tins ..... lb.	1.75	1.90
Rectified, 25 lb tins..... lb.	2.05	2.20
Caraway, USP..... lb.	1.35	1.40
Cardamon, NF, 1 lb bot..... lb.	15.00	16.00
Cascarilla, USP, 1 lb bot..... lb.	60.00	75.00
Cassia.....	...	...
Redist, USP, 50 lb cans... lb.	.85	.90
Cedar Leaf, 50 lb tins..... lb.	.75	.80
Cedar Wood, light, 1000 lb drs ..... lb.	.28	.30
Celery, 1 lb bot..... lb.	...	7.50
Chaulmoogra, USP 80 lb cases lb.	...	1.50
Cinnamon Ceylon, 1 lb bot... lb.	9.00	10.00
Leaf, 5 lb bot..... lb.	1.85	1.95
CITRONELLA Ceylon, 1000 lb drs..... lb.	.35	.36
50 lb tins..... lb.	.36	.37
Java, 400 lb drs..... lb.	.48	.51
50 lb tins..... lb.	.50	.55
Civet, Abyssin, horns..... oz.	2.10	3.00
Cloves, USP, 50 lb cans..... lb.	.80	.85
6 lb bot..... lb.	.85	.90
Copaiba..... lb.	.45	.50
Coriander, USP, 10 lb bots..lb.	3.90	4.15
Croton USP, 25 lb tins..... lb.	2.50	2.75
Cubebs, USP, 5 lb bot..... lb.	2.55	2.65
Cumin, 1 lb bot..... lb.	7.00	7.50
Dill, 25 lb cans..... lb.	3.00	5.25
Erigeron, 20 lb tins..... lb.	.95	1.05
EUCALYPTUS Austi, USP, 56 ib cans, cases..... lb.	.23	.24
500 lb drs..... lb.	.21	.22
Fennel, USP, 25 lb tins..... lb.	.95	1.10
Geranium African, 25 lb tins..lb.	4.25	5.00
Bourbon, 28 lb tins..... lb.	4.30	4.85
Turkish, 28 lb tins..... lb.	1.70	1.85
Ginger, 1 lb bot..... lb.	3.50	3.75
Gingergrass, 28 lb tins..... lb.	2.50	2.70
Grape Fruit..... lb.	2.90	3.00
Hemlock, 25 lb tins..... lb.	.85	1.00
Juniper Berries, USP, 25 lb tins ..... lb.	1.20	1.25
Wood, 50 lb tins..... lb.	.50	.60
Labdanum, 5 lb bot..... lb.	5.50	6.00
LAVENDER, USP, 28 lb tins ..... lb.	1.70	1.95
Spike Spanish, 50 lb cans.. lb.	.48	.65
Lemon Ital, 25 lb cans..... lb.	.85	1.15
California 35 lb cbys.... lb.	.75	.80
Lemongrass, native, 50 lb cans ..... lb.	.42	.45
Limes, expressed, 25 lb tins.. lb.	11.00	12.75
Distilled, 25 lb tins..... lb.	6.50	7.00
Linaloe Mex., 70 lb cases.... lb.	...	1.40
Mace, distilled, 50 lb tins.... lb	.85	.90
Mandarin, 25 lb cases..... lb.	4.20	4.70
Musk Pods Cabardine, tins.. lb.	...	...
Musk Tonquin, tins, Pods... oz.	24.00	26.00
Grains Cabardine, tins.... oz.	...	...
Tonquin, tins, Grained.. oz.	28.00	34.00
MUSTARD, USP, 1 lb bots. lb.	8.50	9.00
Artif, USP, 5 lb bot..... lb.	1.50	1.60
Neroli Bigarade, ¼ & ½ & 1 lb bot ..... lb.	75.00	105.00
Petale, 1 lb bot..... lb.	95.00	105.00
Artificial, 1 lb bot..... lb.	5.00	15.00
Nutmeg, USP, 50 lb tins.... lb	.85	.90
ORANGE BITTER, 25 lb tins ..... lb	1.50	1.90
Sweet W Ind, 25 lb tins.. lb	1.25	1.50
Italian, 25 lb cop..... lb	1.30	1.55
Orange American, Cold pressed 25 lb tins..... lb.	1.40	1.60
Distilled, 25 lb tins..... lb.	.80	1.00
Spanish, 25 lb tins..... lb.	...	1.30
Oil Orris, concrete..... oz.	4.00	4.25
Origanum, 50 lb cans tech... lb.	.25	.27
Parsley, 1 lb bot..... lb.	6.50	6.75
Patchouli, 5 lb bot..... lb.	3.50	4.25
Pennyroyal, dom, 25 lb tins.. lb.	1.70	1.90
Imported, 25 lb tins..... lb.	...	1.35
Pepper Black lb.....	...	6.00
Peppermint, nat. 60 lb cases lb.	1.85	1.95
Redis, USP, 60 lb cs..... lb.	2.05	2.15
Petit Grain S A., 25 lb tins.. lb.	.95	1.05
French, 1 lb bot..... lb.	4.50	4.75
Italian, 25 lb tins..... lb.	2.20	2.30
Pimento Leaf, 25 lb tins .... lb.	1.30	1.45
Berries, 25 lb tins ..... lb	3.00	3.10
Pine Needle Siberian, cans.. lb.	.75	.90
Pinus, Sylvestris, 25 lb tins.. lb.	1.30	2.00
Pumilio, USP, 25 lb tins... lb.	1.90	1.95
Rose Fr, 8, 16, & 32 oz pkgs.. lb.	14.00	17.00
Bulg, 8, 10 & 32 oz pkgs... oz.	6.00	17.00
Rosemary, USP, 27½ lb tins.. lb.	.34	.40
1000 lb drums..... lb.	.32	.38
Tech, 25½ lb tins..... lb.	.26	.28
Rue, 1 lb bot..... lb.	2.00	2.25
SANDALWOOD, E Ind ,USP, 100 lb case..... lb.	5.50	6.50
W Indian (Amayris), 25 lb tins..... lb.	2.85	2.95
Australian, Tins.....	5.65	5.65
Sassafras, USP, 50 lb cans... lb.	.72	.85
Artificial, 1000 lb drs, 60 lb cans..... lb.	.16½	.18½
Safrol, cans..... lb.	.22	.24
Sage, Dalmatian, 25 lb. cans. lb.	2.00	2.10
Savin, 50 lb tins..... lb.	1.95	2.20
Snakeroot, Canada..... lb.	8.25	8.50
SPEARMINT, USP, 50 lb tins ..... lb	.90	1.10
Spruce, 50 lb tins..... lb	.70	.75
Tansy, American, 25 lb tins.. lb.	1.80	1.95
Tar, 50 gal bbls..... lb.	.25	.30
USP, 50 gal bbls..... lb.	.75	1.50
Thyme, red, NF, 25 lb tins.. lb.	.60	.75
White, NF, 25 lb tins..... lb.	.65	.80
Tech, 110 lb drums..... lb.	.50	.55
Turpentine, USP, rect cbys.. lb.	.27	.30
Vetivert Bourbon, 10 bot.... lb.	4.00	4.25
Indian, 1 lb bot..... lb.	25.00	38.00
Java, 1 lb bot..... lb.	12.00	13.00
Wine, heavy, 1 lb bot..... lb.	1.50	1.60
WINTERGREEN Gaultheria, true, 25 lb tin..... lb.	8.00	10.00
Southern, 25 lb tins.... lb.	3.75	4.00
Synthetic see Methyl salicylate.....		
Wormseed, Balt, 25 lb tins... lb.	1.90	2.20
Wormwood, dom, 25 lb tins.. lb.	2.25	2.75
Ylang Ylang Bourbon, 10 lb tins No. 1..... lb.	4.75	5.00
10 lb tins No. 2..... lb.	4.25	4.50
Manila, 1 lb bot..... lb.	22.00	27.00

Drugs and Spices

Aconite Root, USP, bags....lb.	.13	.14
Agar Agar, No. 1, bales....lb.	.55	.57
Agar Agar No. 2, bales.....lb.	.48	.50
Almonds Meal.....lb.	.23	.28
Aletris Root, bags.....lb.	.17	.19
Alkanet Root, bags.....lb	.09	.10
ALOES, Cape, 400 lb cases. lb.	.10	.11
Curacao, 140 lb cases.....lb.	.11	.12
Socotrine, Whole, 300 lb cs lb.	.32	.35
Althea Root, bags.....lb.	.16	.18
Cut cases.....lb.	.15	.22
Angelica Root, bags.....lb.	.12	.13
Angostura Bark, bags.....lb	.18	.19
Anise Star case.....lb	.12	.13
Spanish, bags.....lb	.08	.09
ARABIC GUM, White, No. 1, 220 lb bags.....lb.	.14	.15
Seconds, 220 lb bags.....lb.	.13	.14
Sorts, Amber, 220 lb bags..lb.	.06½	.06½
Powd, USP, 300 lb bbls....lb.	.10	.13
Areca Nuts, 100 lb bbls.....lb.	.05	.07
Powd, 100 lb bbls.....lb.	.10	.11
Arnica Flowers, bales.....lb.	.09	.10
Root, bags.....lb.	.40	.41
Arrowroot, St. Vincent, powd bbls.....lb.	.10	.11
Asafoetida, 250 lb cases.....lb.	.17	.18
Powd, 50 lb boxes.....lb.	.28	.29
Balm Gilead Buds, bags....lb.	.22	.23
Balmony Herbs, bales.....lb.	.12	.14
BALSAM COPAIBA Para, 80 lb cases.....lb.	.16	.17
South American, USP, 80 lb cases.....lb.	...	.24
Peru, 120 lb cases.....lb.	.90	.95
Tolu, 90 lb cases.....lb.	.75	.85
Barberry Bark, of root, bags lb.	.16	.17
Bayberry Bark, bales.....lb.	.07	.08
Wax bbls.....lb.	.17	.19
BELLADONNA LEAVES, bale .....lb.	.12	.14
Root, bags.....lb.	.11	.12
Bees Wax, White, cases.....lb.	.32	.36
Yellow refined cases.....lb.	.22	.25
Yellow Crude Bags.....lb.	.16	.17
Benzoin Gum, Siam, boxes..lb.	1.10	1.20
Sumatra, cases.....lb.	.18	.20
Berberis Aquafolium Root, bags .....lb.	.08	.09
Beth Root, bags.....lb.	.08	.09
Black Indian Hemp Root, 100 lb bags.....lb.	.10	.11
Blood Root, bags.....lb.	.10	.11
Blueflag Root, bags.....lb.	.12	.13
Boldo Leaves, bales.....lb.	.15	.17
Boneset Herb, bales.....lb.	.08	.09
Borage Flowers, bales....lb.	.16	.18
Broomtop Herb Cut, bales..lb.	.07	.08
Bryonia Root, bags.....lb.	.09	.10
BUCHU LEAVES Short, 250 lb. bales.....lb.	.20	.22
Long bales.....lb.	.75	.80
Buckbean Leaves, bales.....lb.	.08½	.09
Buckthorn Bark, bags.....lb.	.04½	.05½
Berries, bags.....lb.	.29	.34
Burdock Root, bags.....lb.	.08	.09
Seed bags.....lb.	.30	...
Burgundy Pitch, 110 stand gross for net.....lb.	.08	.09
Imported.....lb.	.10	.11
Calabar Beans, bags.....lb.	.15	.16
Calamus Root, blchd cases..lb.	.26	.28
Unbleached, bags.....lb.	.07	.08
Calendula Petals, imp bales..lb.	.40	.43
Calisaya Bark, bales.....lb.	.19	.20
Powdered, bbls.....lb.	.24	.25
Canary Seed, South America, bags.....lb.	.05	.05½
Dutch, bags.....lb.	.05	.06
Candelilla Wax, bags.....lb.	.12	.13
Cannella Alba Bark, bales...lb.	.25	.26
Cannabis, U.S.P.....lb	.16	.23
Cantharides, Chinese, cases..lb.	.70	.75
Powdered, boxes.....lb.	.80	.90
Russian, cases.....lb.	No stocks	
Powdered, boxes.....lb.	No stocks	
Caraway Seed, African, bags .....lb.	.04¾	.05¼
Dutch, 11 lb bags.....lb.	.12	.13
Cardamon bleached, cases...lb.	.90	.95
Decorticated, cases.....lb.	.58	.60
Carnauba Wax No. 1, 100 lb. bags.....lb.	.22	.23
Cascara Amarga, 150 lb bbls.lb.	...	.30
So called bales.....lb.	.25	.30
CASCARA SAGRADA,		
1930 bark .....lb.	.10	.11
1931 bark.....lb.	.09	.10
1932 bark.....lb.	.08¾	.09¾
Cascarilla Bark, quills, bales.lb.	.65	.70
Siftings, bbls.....lb.	.50	...
Cassia Batavia No. 1 bbls....lb.	.07	.07½
Shortstick, bales.....lb.	.06	.06¼
Batavia No. 3, bales.....lb.	.05½	.06
China Select Rolls, cases..lb.	.02¾	.03¼
Broken, bales.....lb.	.05¾	.05¾
Saigon, thin.....lb.	.19½	.20
Buds, cases.....lb.	.17	.18
Fistula, baskets.....lb.	.15	.16
Catnip, Herb, bales.....lb.	.15	.16
Celery Seed, bales.....lb.	.42	.43
Ceresin Wax, White, bags...lb.	.10	.15
Yellow 200 lb. bags.....lb.	.09	.12
Imp white 100 lb. bags.lb.	.21	.38
CHAMOMILE FLOWERS		
Roman, bales.....lb.	.27	.30
Hungarian, cases.....lb.	.14	.15
Charcoal Willow, powd, bbls.lb.	06	.06½
Wood, powd, bbls.....lb.	.04	.05
Chestnut Bark.....lb.	.07	.08
Leaves bales.....lb.	.05	.06
Chicle Gum, 200 lb. bales...lb.	.32	.35
Chiretta, bales.....lb.	.12	.15
Cinnamon, Ceylon, No. 1, bales .....lb.	.12	.14
No. 2 bales.....lb.	.09½	.10
No. 3 bales.....lb.	.11½	.12
Clover Tops, Red, bags ....lb.	.09	.11
Cloves Zanzibar, 135 lb bbl...lb.	.11¾	.12
Cochineal, Black.....lb.	.69	...
Silver.....lb.	.75	...
Cohosh Root, Black, bags....lb.	.05	.06
Blue, bags.....lb.	.06	.07
Colchicum Root, bags.....lb.	.11	.13
Seed, bags.....lb.	.60	.65
COLOMBO ROOT, bags...lb.	.05	.06
Colocynth Pulp, bales.....lb.	.12	.13
Coltsfoot Leaves, bags.....lb.	.06	.07
Comfrey Root, bags.....lb.	.10	.11
Condurango Bark, bags.....lb.	.09	.10
Coriander Seed, Morocco, bags .....lb.	.05	.06
Bleached, bags.....lb.	.07	.08
Corn Silk, bales.....lb.	.05½	.06½
Cotton Root Bark, bales....lb.	.06	.07
Cowhage, 1 oz tins.....lb.	1.00	...
Cramp Bark so called bales..lb.	.06	.07
True, bags.....lb.	.26	.28
Cranesbill Root, bags.....lb.	.08	.09
CUBEB BERRIES, XX bags .....lb.	.30	.31
Powdered, boxes.....lb	.32	.33
Culvers Root, bags.....lb.	.10	.11
Cumin Seed, Malta, bags....lb.	.12½	.12¾
Morocco, bags.....lb.	.05	.06
Cuttlefish, Bone Trieste, Straps .....lb.	.19	.22
French, boxes.....lb.	.18	.21
Powdered, bbls.....lb.	.09	.10
Broken, bales.....lb.	.07	...
Damiana Leaves, bales.....lb.	.15	.16
Dandelion Root, Imp. bags..lb.	.09½	.10
Deer Tongue Leaves, bales...lb.	.08	.10
Digitalis Leaves, bales.....lb.	.11	.12
Dogwood Bark, Jamaica bags .....lb.	.07	.08
American bales.....lb.	.06½	...
Doggrass Root, USP, cut bags .....lb.	.12	.13
Dragons Blood Mass, cases..lb.	.80	.85
Reeds, boxes.....lb.	.90	.95
Echinacea Root, bags.....lb.	.15	.16
Elcampane Root, bags.....lb.	.06	.07
Elder Flowers, bags.....lb.	.16	.19
Elemi Gum, 85 lb cases.....lb.	.09½	.10
Elm Bark, bundles.....lb.	.16	.19
Grinding bags.....lb.	.08	.09
Powdered, bbls.....lb.	.15	.17
Ephedra Vulgaris, bales.....lb.	.05	.06
ERGOT, 150-200 lb bags....lb.	.35	.45
Eucalyptus Leaves, bales....lb.	.05	.06
Euphorbia Pilulifera, Herb, bags.....lb	.05	.08
Euphorbium Gum, cases.....lb.	.14	.20
Fennel Seed, French, bags...lb.	.06½	.07
German bags.....lb.	.08	.09
Foenugreek Seed, 200 lb bags .....lb.	.04	.04½
Fish Berries, 100-125 lb bag..lb.	.15	.16
Flax Seed, Whole 182 lb bbls.lb.	.06	.07
Ground, 180 lb bbls.....lb.	.06½	.08½
Fringe Tree Bark or Root bags .....lb.	.10	.12
Fumigating Pastiles, boxes..lb.	.28	.30
Galangal Root, bags.....lb.	.08	.09
Galbanum Gum, cans.....lb.	.85	.90
Gamboge Gum, 100 lb cases..lb.	.45	.50
Powdered, cases.....lb.	.65	.70
Gelsemium Root, bags.....lb.	.07	.08
GENTIAN ROOT, bags....lb.	.08	.09
Ground bbls, boxes.....lb.	.11	.12
Powdered, bbls, boxes....lb.	.11	.12
Ginger, African, bags.....lb.	.05	.06
Jamaica Grinding bags....lb.	.10	.12
Cochin ABC & Lemon, bags .....lb.	.07½	.07½
Ginseng Root, cultivated cs..lb.	8.00	10.00
Wild Southern, cases.....lb.	11.00	13.00
Golden Seal Root, bags.....lb.	.65	.70
Powdered, boxes.....lb.	.90	1.00
Herb, barrels.....lb.	.35	.40
Grains of Paradise, bags....lb.	.10	.12
Grindelia Robusta, Herb, bale .....lb.	.07	.08
Guaiac Gum, 150 lb cases....lb.	.25	.26
Strained 75 lb cases...lb.	.70	.75
Guarana, tin cases.....lb.	.60	.70
Hellebore Root, Black, bbls. lb.	.05½	.06
White, 250 lb bbls.....lb.	.14	.15
Powdered.....lb.	.17	.18
Helonias Root, bags.....lb.	.26	.28
Hemp Seed, bags.....lb.	.03½	.03¾
Henbane Leaves, USP, bales.lb.	.07½	.08½
HENNA LEAVES, bales....lb.	.07	.08
Powdered.....lb.	.10	.12
Hops, bales.....lb.	.21	.24
Horehound, Herb, bales.....lb.	.07	.08
Hydrangea Root, bales.....lb.	.06	.07
IPECAC ROOT, Carteagna, bags.....lb.	.75	.80
Powdered, 220 lb bbls...lb.	.90	.95
Nicaraugua 125 lb. bags lb.	.70	.75
Isinglass, American, 130 lb cases .....lb.	.95	1.00
Russian (Beluga), boxes...lb.	4.50	...
Jaborandi Leaves, bales.....lb.	.10	.11
Jalap Root, Whole, 150 lb bag.....lb.	.16	.18
USP, Powd, 250 lb bbls....lb.	.21	.24
Japan Wax 224 lb. cases.....lb.	.06	.07
JUNIPER BERRIES, 125 lb bags.....lb.	.05	.05½
Kamala, boxes.....lb.	.21	.26
Karaya Gum, No. 1 Powdered, bbls.....lb.	.10	.10½
Kava Kava Root, bags.....lb.	.13	.14
Kino Gum, Black, cases.....lb.	.50	.55
Kola Nuts, 150 lb bags.....lb.	.05½	.06
Lady Slipper Root, bags....lb.	.30	.35
Larkspur Seed, bags.....lb.	.26	.28
Laurel Berries, bags.....lb.	.08	.09
Leaves, Greek, bags.....lb.	.05	.05½
Italian, bales.....lb.	.08	.09
Lavender Flowers, Ordinary.lb.	.15	.20
Selected.....lb.	.26	.30
Lemon Peel, bags.....lb.	.08	.09
LICORICE ROOT, Whole bbls .....lb.	.12	.15
Spanish Natural bales....lb.	.05½	.07
Powdered, bbls.....lb.	.08	.10
Selected Cases.....lb.	.12	.15
Cutting, 125 lb bags....ln.	.06	.06½
Turkish, 150 lb bales.....lb.	.05	...
Linden Flowers with leaves, bales.....lb.	.18	.19
Without leaves, bales...lb.	.21	.22
Liverwort Leaves, bales.....lb.	.13	.14
Lobelia, Herb, bales.....lb.	.14	.15
Seed, bags.....lb.	.21	.26
Lovage Root, Imp., bags....lb.	.15	.17
Lupulin N. F., tins.....lb.	1.15	1.20
Lycopodium, 88 lb. cases....lb.	.24	.26
MACE SIAUW, No. 1, cases .....lb.	.28	.29
Banda No. 1, cases.....lb.	.35	.36
Batavia No. 2, cases.....lb.	.31	.32
Malva Flowers, Blue, bales..lb.	.55	.60
Black, bales.....lb.	.20	.35
Leaves, bales.....lb.	.12	.13
Manaca Root, bales.....lb.	.20	.21
Manna, Large Flake, cases...lb.	.48	.54
Small Flake, cakes.....lb.	.28	.33
Sorts, cases.....lb.	.45	.50
Mandrake Root, bags.....lb.	.08	.09
Marjoram, Herb.....		
French, No. 1 bales.....lb.	.11	.11½
German, bales.....lb.	.12	.12½
Mastic Gum, 120 lb. cases..lb.	.34	.35
Matico Leaves, bales.....lb.	.18	.21
Mezereon Bark, bags.....lb.	.15	.16
Millet Seed, Yellow, bags...lb.	.02½	.03
Montan Wax, Crude, bags...lb.	.04	.05
Bleached, pure. bags.....lb.	.26	.28
Moss, Iceland, bales.....lb.	.09	.11
Irish, Bleached, bales ....lb.	.10	.12
Mullein Flowers, tins.....lb.	.90	.95
Leaves, bales.....lb.	.07	.07½
Musk Root, Russian, bags...lb.	.06	.07
Myrrh Gum, 200 lb, cases...lb.	.20	.22
Nutgalls, Chinese, bags.....lb.	.22	...
Aleppy, bags.....lb.	...	.20
Powdered, bags.....lb.	.13	.15
Nutmegs, 110's cases.....lb.	.11½	.12
75's & 80's cases.....lb.	.13½	.14
Grinding, bags.....lb	.18	.19
NUX-VOMICA Buttons, bag .....lb.	.05	.06
Powdered, 200 lb bbls...lb.	.08	.09
Oak Bark, bags.....lb.	.06	.06½
Olibanum Gum, 280 lb cases Siftings.....lb.	.06	.07
Tears, No. 1 Extra.....lb.	.21	.23
No. 2.....lb.	...	.15
No. 3.....lb.	.11	.12
Opium Gum, USP, cases....lb.	12.00	13.00
Granular, cans.....lb.	13.00	14.00
Powdered, USP, cans.....lb.	13.00	14.00
Orange Flowers, cases.....lb.	.25	.30
Peel, Bitter, bags.....lb.	.08	.09
Sweet bags,.....lb.	.07	.08
ORRIS ROOT, Flor. bid. bags .....lb.	.08½	.09
Powdered, 200 lb bbls..lb.	.12	.13
Verona, bags.....lb.	.07½	.08
Powdered, 200 lb bbls..lb.	.10½	.11
Fingers, boxes.....lb.	.80	.85
Ozokerite Wax, Brown, Hard lb. Bags.....lb.	...	...
Green, Hard, bags.....lb.	.24	.25
Yellow, Refined, bags.....lb.	.25	.27
Papain, Crude, 150 lb cases..lb.	.20	.25
Pure, Powdered, 10 lb bot..lb.	1.80	1.85
Paprika, bags.....lb.	1.90	1.95
Pareira Brava Root, bags....lb.	.17½	.18
Passion Flower, bales.....lb.	.13	.14
Patchouli Leaves, bales.....lb.	.04½	.05½
Pennyroyal, Herb, 100 lb bags .....lb.	.15	.16
Leaves, 100 lb bags.....lb.	.08	.09
	.12	.13

PEPPERMINT LEAVES, Imp bales	lb.	.18 .26
Domestic, bales	lb.	.17 .21
Pichi Leaves, bags	lb	.08 .09
Pimento Select, bags	lb.	.05½ .06
Pink Root, True, bags	lb.	.25 .27
Pleurisy Root, bags	lb.	.13 .14
Poke Berries, bags	lb.	.15 .16
Root, 200 lb bales	lb.	.06 .06½
Pomegrant Bark of Root, bags	lb.	.28 .30
Bark of Fruit, bags	lb.	.20 .25
Bark of Tree, bags	lb.	.15 .18
POPPY FLOWERS, Red, bags	lb.	.40 .45
Prickly Ash Bark	lb.	.12 .15
Southern bags	lb.	.11 .11½
Northern, bags	lb.	.11 .12
Berries, bags	lb.	.20 .21
Prince's Pine, bales	lb.	.15 .20
Psyllium Seed, Black, bags	lb.	.11 .14
Plantago Seed, Blonde, Bags	lb.	.05½ .07
Pulsatilla, Herb, bags	lb.	.10 .11
Pumpkin Seed, bags	lb.	.11 .12
Pyrethrum Flowers	lb.	.16 .17
Pwd., pure, 200 lb.bbls.	lb.	.20 .21
Quassia Chips, bags	lb.	.05½ .06
Quebracho, bulk, 125 lb. bbl.	lb.	.20 .21
Quince Seed, Spanish bags	lb.	1.20 1.25
Persian, bags	lb	1.25 1.70
Rape Seed, South American, bags	lb.	.05½ .06
Dutch, bags	lb.	.06 .06½
Raspberries, Dried, bbls.	lb.	.30 .35
Red Saunders, bags	lb.	.08 .09
Rhatany Root, bags	lb.	.11 .12
Rhubarb Root, HD, cases	lb.	.18 .19
Powdered, bbls.	lb	.23 .24
Rosemary Leaves, bales	lb.	.05 .05½
Flowers, cases, bales	lb.	.28 .32
Rose Petals, pale	lb.	.14 .15
Red	lb.	.45 .50
Rue, Herb, bales	lb.	.18 .20
Sabadilla Seed, bags	lb.	.16 .17
Powdered, bbls.	lb.	.16 .17
SAFFRON FLOWERS, American, bales	lb.	.19 .20
Valencia, 1 lb cans	lb.	8.50 8.75
Sage Dalmatian, bales	lb.	.05½ .06
Sandarac Gum, 300 lb bbls.	lb.	.23½ .25
Sarsaparilla Root, Honduras, bales	lb.	.55 .60
Mexican, bales	lb.	.13 .14
Sassafras Bark, Ordinary, bales	lb.	.08 .10
Select, bales	lb.	.12 .15
Savory Leaves, bale	lb.	.05½ .06½
Saw Palmetto Berries, bags	lb.	.07 .08
Scammony Resin, boxes	lb.	1.30 1.35
Root, bags	lb.	.06 .07
Senega Root, bags	lb.	.37 .42
SENNA ALEX., 150 lb cases	lb.	.20 .25
Half leaf 150 lb bales	lb.	.08½ .10½
Sifting, 400 lb bales	lb.	.09 .10
Tinnevelly, Bold, 350 lb bales	lb.	.09 .11
Medium Leaf	lb.	.07½ .08½
Small Leaf	lb.	.06 .08
Pods, 350 lb	lb.	.08 .09
Powdered, 200 lb	lb.	... .09
Serpentaria Root, bags	lb.	.32 .33
Simaruba Bark, bales	lb.	.24 .26
Skullcap Leaves, Eastern, bales	lb.	.28 .33
Western, bales	lb.	.15 .25
Skunk Cabbage, Natural, bales	lb.	.11 .13
Snake Root, Canada Natural, bags	lb.	.18 .19
Canada, Stripped, bags	lb.	... .45
Soap Bark	lb.	.08 .09
Cut, 125-175 lb bags	lb.	.06 .07
Crushed, 200 lb bbls.	lb.	.15 ...
Powdered, bbls.	lb.	.10 .11
Spearmint Leaves, American, bales	lb.	.18 .19
Spermaceti, blocks, cakes, cases	lb.	.21 .23
Bulk	lb.	.20 .22
Spikenard Root, bags	lb.	.07 .08
Squaw Vine, bales	lb.	.11 .12
Squills, White, tested	lb.	.05 .07
Powdered, bulk	lb.	.14 .16
Stavesacre Seed, bags	lb.	.13 .14
Stillingia Root, bags	lb.	.07 .08
Stone Root, bags	lb.	.07 .08
St. Ignatius Beans, bags	lb.	... .90
St. John's Bread, bags	lb.	... .06
STRAMONIUM LEAVES, bales	lb.	.12 .13
Seed, bags	lb.	.07½ ...
Strophanthus Seed, Kombe, bags	lb.	1.75 1.95
Styrax Liquid, Artificial	lb.	.26 .35
Genuine, USP	lb.	.38 .43
Sunflower Seed, bags Calif.	lb.	.04½ .05
South American, bags	lb.	.07 .07½
Tamarinds, bbls	lb.	.05 .06
Kegs	keg	3.75 3.85
Tansy, Herb, bales	lb.	.12 .13
Thus Gum, 450 lb bbls	lb.	.05½ .06½
THYME, Spanish, bales	lb.	.06 .07
French, bales	lb.	.07½ .08½
Tonga Root	lb.	.22 .23
Bark, bundles	lb.	.22 .23
Tonka Beans, Angostura Cases		1.40 1.50
Para cases	lb.	.60 .70
Surinam cases	lb.	.65 .75
Tragacanth Gum, No 1, 100 lb. cases	lb.	.80 .83
No. 2	lb.	.60 .65
No. 3	lb.	.50 .55
Powdered, 50 lb boxes	lb.	.65 .70
Turkish cases	lb.	.45 .65
Turmeric Root Madras, bags	lb.	.06 .06½
Aleppy bags	lb.	.05½ .06
Powdered	lb.	.10 .12
China bags	lb.	.11 .12
Turpentine Venice True, 80 lb cases	lb.	.30 .38
Artificial, 80 lb cases	lb.	.15 .16
Uva Ursi Leaves, bales	lb.	.05 .05½
Valerian Root, Belgium bags	lb	.10 .11
VANILLA BEANS, Mexican, whole, cases	lb.	3.00 4.00
Cuts, cases	lb.	2.50 2.65
Bourbon, cases	lb.	.75 1.20
Vetivert Root, 100 lb bags	lb.	.20 .25
Violet Flowers, bags	lb.	.85 .90
Wahoo Bark of Root, bags	lb.	.25 .26
Bark of Tree, bags	lb.	.14 .15
White Pine Bark, Roseed, bags	lb.	.05½ .06
White Poplar Bark, bags	lb.	.06 .07½
Wild Cherry Bark, Natural thin, Green	lb.	.06 .07
Rossed bales	lb.	.09 .10
Thick Rossed, bales	lb.	.04 .05
Wild Indigo Root, bags	lb.	.09 .10
Willow Bark, bags	lb.	.05 .05½
White, bags	lb.	.15 ...
Witch Hazel Bark, bags	lb.	.05 .06
Leaves, bales	lb.	.06 .07
Wormseed, American, bags	lb.	.06 .07
Wormwood, Herb, Imp., bales	lb.	.08 .09
Yellow Dock Root, bags	lb.	.07 .08
Yerba Mate, bags	lb.	.15 .18
Santa, bags	lb.	.07 .08

PATENTS

(*Continued from page 477*)

Amino-Substituted Arsenicals

Arsenious compounds containing at least two amino groups, are caused to react with alkylene oxides and formaldehyde-bisulfide. New therapeutic compounds are characterized by good healing action and complete non-poisonous properties. Oxy-alkylamino group in these compounds is suited for introduction of bismuth into molecule. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany. G. P. No. 545,917, filed September 21, 1930.

Mezcalin

This is an alkaloid with pharmacological properties. Its chemical name is alpha-3: 4:5-trimethoxyphenyl-beta-aminoethane. Ethyl ester of trimethoxy-benzoylacetic acid is converted into corresponding hydroxy-cinnamic acid ester and this is converted into amide which is finally converted into amine. Dr. Hans Frisch and Dr. Edmund Waldmann, Vienna, Austria. G. P. No. 545,853, filed July 3, 1930.

Fixation of Perfumes

For this purpose there are used esters of cyclic alcohols with high molecular weight, soap-forming monocarboxylic acids alone or in admixture with other substances. Esters mentioned are cyclohexanol stearate, methylcyclohexyl palimitate terpineol ester of coconut nut fatty acid. These products are odorless and have high boiling point; they are difficultly saponifiable and hence well suited for perfuming soaps. Deutsche Hydrierwerke A.G. Germany. G. P. No. 548,617, filed April 19, 1932.

Antituberculosis Serum

Living tissue, which has been changed by regressive metamorphosis under action of tubercular germ, so-called cheese, is isolated and freed from bacteria, that is filtered. Then, either filtrate or filtrate, mixed with extremely fine residue, is incorporated with serum base and serum is obtained in usual manner. Reischach & Co. G.m.b.H. G. P. No. 541,238, filed September 25, 1927.

Sulfur Preparations

Process for manufacture of sulfur preparations, which give colloidal solutions with water, involves heating sulfur with sugar and starch until melt is formed. Operation is carried out in presence of air. Melt is cooled, suspended in water, and substances, which are colloidally soluble in water, are removed and dried. Jacob Mrochem, Breslau, Germany. G. P. No. 543,603, filed October 1, 1929.

Stable Iron Medicaments

Process for manufacture of stable preparations, containing inorganic ferrous compounds, particularly ferrous chloride. Ferrous salts are incorporated with fats and preparations are used as pharmaceuticals. Thus ferrous chloride, is introduced into molten fat, free from oxidases and oxygen in absence of air. Mixture is allowed to congeal and is ready for packing. Pharmaceutische Eerke Norgine A.G., Prague, Czechoslovakia. G. P. No. 543,148, filed March 27, 1928.

Soapless Shaving Cream

Ten parts of pectinous substances in solution of any concentration are mixed with 1 part of essential oil or other perfume. Mixture is vigorously triturated and is ready for use. Pectin solution generally contains 89 parts water to ten parts pectin. Deutsche Pectin Gesellschaft m.b.H., Frankfurt-am-Main, Germany. G. P. No. 554,084, filed June 26, 1928.

Lipsticks

Lipsticks and rouge in pencil form are made as mere mechanical mixtures of alkali and fats, waxes, fatty oils and like which avoids formation of greasy coating on skin and smearing of color. Emulsions are used in place of straight mixtures. Thus mixture of 10 parts almond oil, ten parts lanolin, 100 parts spermaceti, one part neutral almond oil soap is melted at 50° to 60° C. Then, without allowing temperature to drop, 40 parts of an approximately 12 to 15% solution or suspension of fat-insoluble coloring matter in emulsifiable solvent are added. Mixture is

Professional Service

BENJAMIN T. BROOKS, Ph. D.
Industrial Research
25 YEARS' EXPERIENCE
WITH ESSENTIAL OILS
◆
114 East 32nd Street New York, N. Y.

Professional Service

PEASE LABORATORIES, Inc.
39 West 38th Street New York
Complete Analytical, Consulting and Research Service
Foods, Drugs, Cosmetics, Soaps, Antiseptics, Specialties

Classified

Rates—All classifications $1.00 an issue for 20 words or less; additional words 5c each.
Payment must accompany order. Add 10 cents if replies are to come to a box number and be forwarded.
THE DRUG & COSMETIC INDUSTRY
101 West 31st St. New York

? VITAMIN $\frac{A}{D}$ UNITS ?

Check the potency of your **cod liver oil** by biological assays, reliably conducted according to approved American methods. Fees are reasonable and will be submitted on request.

FOOD RESEARCH LABORATORIES, Inc.
Philip B. Hawk, Director
114 E. 32nd St. New York City
Member Ass'n Consulting Chemists and Chemical Engineers.

H. A. Seil, Ph. D. E. B. Putt, Ph. C., B. Sc.

SEIL, PUTT & RUSBY, Inc.

Analytical and Consulting Chemists
Formerly Experts for U. S. Dept. of Agriculture

Analyses Made Formulas Developed
Research Investigations Conducted

Specialists in the Analysis o,
Beverages Essential Oils
Flavoring Extracts Toilet Preparations
Foods Spices Drugs
Proprietary Medicines Special Formulas
Pyrethrum Insecticides

Lab's: 16 East 34th St. New York, N. Y.
Telephone: AShland 4-4343

Business Opportunities

SWITZERLAND: Factory of CHEMICALS, (joint Stock company) having over thirty years existence, wants to develop its activity by starting *new manufactures* of products having good opportunity in the Swiss market. Please address offers under *P. 1044-2 L., Publicitas, Lausanne, Switzerland.*

Patents

LAWALL & HARRISSON
Charles H. LaWall Jos. W. E. Harrisson
Analytical and Consulting Chemists
Pharmaceutical and Chemical Research
Process and Formula Development
Food, Drug and Water Analyses
Legal Testimony
214 South 12th Street Philadelphia, Pa.

PATENT YOUR IDEAS REGISTER YOUR TRADE-MARK BY
Z. H. POLACHEK
1234 BROADWAY
31st. NEW YORK
REG. PATENT ATTORNEY PROF. ENGINEER
WHAT IS YOUR INVENTION?
Send me a simple sketch or a model for
Confidential Advice—Do It Now!

Situations Wanted

Manufacturing chemist with 10 years practical experience with large New England wholesale drug house, as Laboratory Manager and sales promoter, desires interview with live, reputable pharmaceutical manufacturer, in regard to introducing and establishing their complete line in New England territory. Box 863, THE DRUG AND COSMETIC INDUSTRY.

agitated until emulsion is formed, which is poured into molds, and allowed to solidify. Sweet almond oil may be replaced by other fatty oils, such as olive oil, fruit kernel oils, oil of ben and like. Neutral almond oil soap may be replaced by other neutral soaps, alkali or ammonium salts of sulfonated castor oil or saponins. Paul Baudecroux, Paris, France. G. P. No. 557,609, filed September 23, 1927.

Perfume for Spraying

These preparations contain methyl chloride of similar organic compounds boiling at —5° C. and organic solvents which boil below 100° C. Thus 1.5 parts terpineol are dissolved in 80 parts methylene chloride and 20 parts methyl chloride are added at low temperature. Solution is filled into ampules. J. D. Riedel-E. de Haen A.G., Berlin-Britz, Germany. G. P. No. 557,259, filed February 1, 1931.

Rouge Paint Remover

This consists of pure palm kernel oil or coconut oil or mixtures of both with paraffin without non-fat soluble substances. For example 100 parts refined palm kernel oil are slowly heated to 50° C. in melting kettle and mixed with 7.5 parts hard paraffin. Mass is cooled. Perfumes may be added before mass cools. It is pressed into suitable form. Addition of hard paraffin has purpose of increasing melting point of palm kernel butter from 25° to 26° C. to 33° to 34° C. which corresponds to skin temperature. Julius Steiner, Berlin, Germany. G. P. No. 531,233.

Salve Base

Salve base is made by triturating ground almonds with whole milk. Mixture is pressed out and completely emulsified liquor obtained is evaporated by slow heating until thickly-viscous, emulsified mass is obtained. Sugar may be added before evaporation. Base is suitable for cosmetics. Hermann Hofer-Massard, Lausanne, Switzerland. G. P. No. 553,947, filed December 6, 1927.

Sexual Hormone Medicament

Vegetable organisms or extracts obtained from them are extracted with water in presence of alkaline earths, or with organic solvents diluted with water. Substances, which have sexual hormone action, are separated from extracts in usual manner. Extraction may be carried out in presence of alkaline earths with addition of inert binders. Schering-Kahlbaum A.G. Berlin, Germany. G. P. No. 546,750, filed July 30, 1927.

Anthraquinone Drugs

Process is for manufacture of extracts of anthraquinone—containing drugs, these extracts containing highly active anthranyl glucosides whose bitterness has been removed. Aqueous-alcoholic extracts of these drugs are mixed with iron chloride, and then calcium carbonate and trisodium phosphate are introduced. Precipitate is removed by filtration. Dr. Walter Straub, Muenchen, Germany. G. P. No. 539,289, filed May 2, 1930.

Tooth Paste

Benzyl alcohol is added to usual paste composition or simply mixed with fillers or diluents. It may also be used alone. Mixture consists of 10 parts benzyl alcohol, 70 parts precipitated chalk and 20 parts glycerin. Benzyl esters of organic acids, such as acetic, formic, lactic and valeric may be used in place of benzyl alcohol. Franz Noecker, Stuttgart Germany. G. P. No. 556,490, filed September 22, 1927.

Hair Dye

Pasty mixture consists of solution of soap and pulverized mixture of henna, Roman chamomile, sumac, pyrogallic acid, chestnut leaves, catechu and onion shells. Addition of latter ingredient makes coloring action more uniform. Coloring action is also accelerated. Copper chloride may be added although it is under suspicion for such use. Ingredients are mixed in various proportions to give different shades of dyed hair, varying from black through brown to blond. Hans Geier, Muenchen, Germany. G. P. No. June 12, 1929.

MANAGEMENT FORUM

(*Continued from page 436*)

Milling Tooth Paste and Shaving Cream

It may be said that comparatively few manufacturers fail to mill their tooth paste and shaving cream after it has been finished. But not all of them are conversant with the variety of equipment with which it may be accomplished. This resume is up to date so far as we know. When advances take place as they probably are, we shall report further.

The Buhr Stone Mill

This is an old favorite especially for grinding tooth paste. Rapidity of production and excellence of milling have enabled the stone mill to hold its place.

The Paint Mill

This mill is commonly known in the trade as an ointment mill. It was adopted from the paint industry and is possibly the largest, oldest form of refining mill in the trade.

Milling Rolls

This comes next. Great numbers of them are used. They deliver an exceptionally smooth and refined product. They are rather more expensive than the foregoing type, somewhat speedier in output, but nevertheless limited to the speed, size and number of rolls. In order to handle a large output a number of three or six roll mills must be used.

Colloid Mill

This has been used with excellent results. Objections formerly raised because of the amount of air whipped in have been overcome by self contained forced feeds and changes in the construction of rotors.

Pulverizer

This is in some ways an unorthodox machine. It is intended primarily as a grinding machine for dry materials. Its construction and mechanical action is such that it is more suitable for dry milling than any other. But recent tests have shown that by the use of an air tight delivery hopper and by tightening up the casing of the machine, comparatively little or no air is beaten in and the delivery of the machine is very great.

There have been some experiments made with other types of mill, but today some of them have proven abortive because of charging or discharging difficulties. As shaving cream and tooth paste are made in large volume the process must be continuous, and although a forced feed may be necessary in some cases, the machine must discharge itself.

Mifflin Modernizers

Some day very soon our friend Dr. Brown, Factory Manager of Mifflin Chemical Company of Philadelphia is going to write a piece for us on some improvement work he has been doing. It will be an interesting story. Pints of mouth wash at 120 a minute! Can you tie that?

ABSTRACTS

(*Continued from page 479*)

Auto-Oxidation in Pharmaceuticals

Negative catalysis is important in pharmaceutical practice. Stabilization of chloroform does not depend on destruction of injurious oxidation products. Benzaldehyde and essential oils may be stabilized with alcohol or trace of hydroquinone. In case of phenols and particularly phenolic bases, all required to secure stabilization is to avoid alkaline reaction. Mannite has been advantageously used for stabilizing solutions of sulfites and thiosulfites. Considerable attention is given to positive catalysis of oxidation in fats, oils, and other organic compounds. K. Bodendorf, Chemiker Zeitung, 1932, page 813.

Medicinal Camphorated Oils

Study has been made of physical constants of medicinal camphorated oils. Addition of camphor to olive oil does not greatly affect various constants, such as density, index of refraction, angle of rotation of polarized light, etc. Neither is capillarity of oil affected. However, lowering of critical solution temperature of oil in ethyl alcohol or acetic acid by addition of natural camphor can be used for approximate determination of camphor in commercial oils. Chamomile oil can be distinguished from poppy oil by higher critical solution temperature of latter in 95% ethyl alcohol. Faure. Journal de Pharmacie et de Chimie, 1932, series VIII, volume 16, pages 58 to 62.

Analysis of Barbituric Acid Narcotics

Best reagent is copper acetoacetate. Reddish violet precipitate is obtained by addition of drop of pyridine to solution of copper acetoacetate in ethyl alcohol, ethyl ether, or benzene mixed with similar solution of barbituric acid hypnotic, but not acid itself. Precipitate is treated with dilute sulfuric acid, liberating free narcotic. Latter can be extracted with ethyl ether. Study has been made of Ekkert luminal reaction, and colors and fluorescence in daylight and light from quartz lamp are recorded for numerous narcotics. Characteristic colors are obtained with nirvanol and sulfuric acid. B. Jonsson. Svensk Farm. Tidskr., volume 35, pages 659 to 666.

Iodine in Pharmaceuticals

Details are given of rapid and accurate determination of iodine in iodotannin preparations. Tannin is precipitated with zinc acetate in ammonia. Filtrate is titrated by Volhard method. Iodine in iodopeptone preparations is liberated with nitric acid (density 1.53) and extracted with chloroform. Extract is titrated directly with tenth normal sodium thiosulfate after addition of aolcohol. G. Thomis, J. Pharm. et de Chimie, 1932, VIII, volume 15, pages 597 to 600.

Alkaloidal Derivatives

Most alkaloids combine with hydroferrocyanic acid in acid, neutral and alcoholic solutions and with hydroferricyanic acid in acid and alcoholic solutions. Salts of different composition are obtained. No salts were obtained with benzocaine, orthocaine, borocaine, ephedrine and diacetoneamine. Properties of alkaloidal salts are described, including papaverine, benzamine, quinidine, quinaldine and berberine hydroferricyanides and hydroferrocyanides. W. M. Cumming and J. A. Stewart. Journal of the Society of Chemical Industry. 1932, pages 273-4T.

Ointment Bases

Various properties of ointment bases, such as lanolin, petrolatum, cholesterin and benzoinated products, are studied. Following test is recommended for determinating purity and stability of petrolatum to action of light and air. One gram of petrolatum is placed in small, well-dried, pomade jar and one cc. of concentrated sulfuric acid is added and mixed. If color is reddish brown, petrolatum will not effectively resist action of light. Place mass in 100 cc. of cold water and work it into ball in water. Latter will become slightly opalescent and this opalescence will resist filtration. Petrolatum-sulfuric acid mass should be scarcely gray in color. Filtrate is treated with 2.5 cc. potassium permanganate solution 0.1% and heated to 60° C. There should be no reduction. O. Schmatolla. Pharmazeutische Zeitung, 1932, number 56.

Alkamine Esters of Aromatic Carboxylic Acids

These are important new pharmaceutical products. Various examples are given and such products as the following are mentioned, described for properties:—30dimethyl-amino-2-dimethylpropan-1-ol, 30diethylamino-2-dimethylpropan-1-ol, etc. Carl Mannich. Austrian Patent No. 127,022, filed September 17, 1930.

Trichloro-Alcohols

These products are made by causing corresponding ketones to react with alkali amides in presence of chloroform. Resulting alcoholates are decomposed with acids. Products may also be used as starting points in manufacture of medicinal chemicals. Dr. Gustav Heilner, Berlin, Germany, assignor, Chemische Fabrik Dr. Joachim Wiernik & Co. A. G., Berlin-Waidmannslust, Germany. G. P. No. 515,539, filed January 14, 1925.

PLYMOUTH
RAW MATERIALS

● The Standard of Excellence
for more than 30 years

FOR TOILET POWDERS

Zinc Stearate, U. S. P.
Magnesium Stearate
Rice Starch (Java)
Zinc Oxide, U. S. P.
Magnesium Carbonate, U. S. P.
Kaolin
Italian Talc

FOR TOILET CREAMS

Crystal "E" Cream Oil
Beeswax, white, U. S. P.
Cirine Wax
Stearol
Lanolin (Anhydrous)
Petrolatum (Solid)
Paraffin Wax
Spermacetti
Ozokerites
Thoreps—The New Absorption Base

● If you want the very highest quality, use Plymouth materials. Samples and prices are yours for the asking. Our laboratory will gladly co-operate with you in developing any special qualities you may desire.

M. W. PARSONS
Imports
and
Plymouth Organic Laboratories, Inc.
55 ANN STREET NEW YORK, N. Y.

Index to Advertisers

Alsop Engineering Co., New York ..... Cover 2
American Lanolin Corp., Lawrence, Mass 473
American Potash & Chemical Corp., New York 471
Anchor Cap & Closure Corp., Long Island City, N. Y. ..... Insert facing 401
Armstrong Cork & Insulation Co., Cork Division, Lancaster, Pa. 400

Bromund Co., E. A., New York 465
Bush & Co., Inc., W. J., New York 453

California Fruit Growers Exchange, Ontario, Cal 461
Citro Chemical Co., Maywood, N. J. 473
Cleveland Container Co., The, Cleveland, Ohio 455
Coignet Gelatines, New York 473
Colgate-Palmolive-Peet Co., Chicago, Ill. 473
Colton Co., Arthur, Detroit, Mich. 449
Crown Cork & Seal Co., Baltimore, Md. 402

Dow Chemical Co., Midland, Mich. ..... Cover 1
Dreyer Inc., P. R., New York 471

Fritzsche Brothers, Inc., New York 447

General Drug Co., New York, N. Y. 451
Givaudan-Delawanna, Inc., New York 395
Goldschmidt Corp., Th., New York 435
Gordon, H. R. M., New York 455
Gutmann & Co., Ferdinand, Brooklyn, N. Y. 455

Heyden Chemical Corp., New York 459
Hopkins & Co., J. L., New York 449

Iliff-Bruff Chemical Co., Hoopeston, Ill. 471
Industrial Chemical Sales Co., Inc., New York ..... Cover 3
Interstate Color Co., Inc., New York 473

Kimble Glass Co., Vineland, N. J. 401

Leonhard Wax Co., Inc., Theodor, Paterson, N. J. 433

Magnus, Mabee & Reynard, Inc., New York 397
Mallinckrodt Chemical Works, St. Louis 406
Merck & Co., Inc., Rahway, N. J. ..... Insert facing 457
Mixing Equipment Co., Inc., Rochester, N. Y. 471
Monsanto Chemical Works, St. Louis ..... Insert facing 456

New England Collapsible Tube Co., New York 405
N. Y. Quinine & Chemical Works, Brooklyn, N. Y. 480

Owens-Illinois Glass Co., Toledo, Ohio 398

Parento, Inc., Compagnie, Croton-on-Hudson, N. Y. 439
Parsons, M. W., New York 488
Penick & Co., S. B., New York 469
Pfaltz & Bauer, Inc., New York, N. Y. 451
Pfizer & Co., Inc., Chas., New York ..... Cover 4
Phoenix Metal Cap Co., Chicago, Ill. 393
Pneumatic Scale Corp., Ltd., Norfolk Downs, Mass. 399
Powell & Co., Inc., John, New York 465

Rossville Commercial Alcohol Corp., Lawrenceburg, Ind. 463

Schuylkill Chemical Co., Philadelphia, Pa. 469
Schwabacher & Co., Inc., S., New York 467
Sherka Chemical Co., Inc., New York 467
Sturge, John & E., Birmingham, England 403

Todd Co., A. M., Kalamazoo, Mich. 473

Ungerer & Co., New York 445
U. S. Bottlers Machinery Co., Chicago ..... Insert facing 400
U. S. Industrial Alcohol Co., New York 443

van Ameringen-Haebler, Inc., New York 437

Will & Baumer Candle Co., Inc., Syracuse, N. Y. 469
Wilson Laboratories, Chicago, Ill. 469